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D. B. WEBSTER

The William Eby Pottery Conestogo, Ontario 1855-1907

Occasional Paper 25
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The William Eby Pottery Conestogo, Ontario 1855-1907

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The William Eby Pottery Conestogo, Ontario 1855-1907

Introduction

Only a small bibliography, and that based on meagre documentary evidence, exists on the potteries and potters of 19th century Ontario. We can judge from existing pieces something of the range and variety of wares made, but we have only superficial knowledge of the nature of individual commercial potting operations, and of the level and extent of technology in this essentially craft-based industry. Even less is known of the origins and backgrounds of the pottery proprietors themselves, or of the cultural and regional characteristics of their products.

The production of domestic pottery in 19th century Ontario, certainly so far as existing pieces would indicate, was centred very largely on basic container and storage wares. Lighter and finer utilitarian household pieces were either fabricated in far smaller quantity than heavy vessels, or far fewer have survived.

The typical Ontario earthenware or terra cotta pottery was an individual or, at most, a family enterprise. As such, these potteries concentrated on producing simple and inexpensive utility wares, made from local clays, and for a local and usually rural market. The potter's craft was hardly lucrative, and large land holdings suggest that in some and perhaps many cases pottery-making was a part-time occupation, combined with farming.

Most potters in Ontario were of German, Pennsylvania, or English origin. Many had generations of the craft behind them, and solid training in both a family and an ethnic tradition. To a very great extent, however, the household pottery needs of early rural Ontario dictated universal forms, ultimate simplicity, and minimum cost, for production of earthenwares to survive at all. In the latter half of the 19th century the entire craft system in North America was in rapid decline, and this had a pronounced effect on what potters or other individual craftsmen could effectively produce in competition with technology and growing industrial systems.

In minor details and very dilute form, the national and cultural traditions of the potters are often reflected in their products. In Ontario the exotic influences are typically quite mixed, but in most cases it is still possible to sort out the main streams – the Germanic, the English, and the Anglo-American. One help, certainly, is a thorough knowledge of the background of individual potters. This, however, is often impossible to put together in any detail, nor does it necessarily provide reliable conclusions as to the sort of pottery a certain man might have produced. It is not uncommon, for example, to find German or Pennsylvania-German potters with English or Anglo-Canadian employees; the reverse is equally true.

Thus we must focus primarily on the product – the known production of potteries operated by people who, hopefully, can themselves be at least reasonably well traced.

The basic ethnic characteristics of Ontario pottery become apparent largely through the simple observation of a vast number of existing pieces, until one develops an instinct of experience. Unfortunately, Ontario earthenwares are only rarely marked, and do not reveal their exact origins. Decades removed, it becomes very difficult to tie pot and potter together. Thus there is no solution other than to study this pottery in original context, by excavating early kilns and waster dumps. Excavation alone, however, cannot answer all questions or provide a complete picture, and extensive documentary research becomes an essential prerequisite to this form of archaeology.

History of the Potteries

William Eby, a Mennonite potter of Pennsylvania-German descent, operated for one of the longest spans, from 1855 to 1899, of any known Ontario earthenware maker. His productive period, and his background and cultural tradition, plus some existing and reliably attributed wares, made his operations and products an ideal focus for investigation.

William K. Eby was second generation Ontario-born, a grandson of one of those thousands of Pennsylvania settlers who had come to take up land and live in central Ontario during the 1785 to 1815 period. Some of these German-speaking people migrated as refugees – United Empire Loyalists, but certainly far more were attracted by the opening of new agricultural land, which led them to other areas of the United States as well as to Ontario. Then, too, there was undoubtedly an urge toward togetherness, particularly among the Mennonites – the maintenance of family units and cultural and religious integrity, so that migration became progressive and cultural continuity was assured when people finally reached new lands and homes.

The Eby family had settled in Switzerland during the late 16th century to escape Roman Catholic persecutions. During the same period some members of the family had joined the Mennonite church (after Menno Simon, the Dutch Protestant who founded the church in 1537). Then, after William Penn, in the early 18th century, offered free homes in Pennsylvania, with security for all reform religious denominations, European Mennonites began their migration to North America. Among them was Theodorus Eby, born in Zurich in 1663, who came in 1715 to settle in Lancaster County, Pennsylvania.[1]

In 1804 George Eby, a great-grandson of Theodorus, moved from Lancaster County to Waterloo County, Ontario, and took up land in Lot No. 1 of the German Company Tract in Waterloo Township. There Samuel was born the next year as George's fifth child.[2] Samuel Eby, later known as "Potter Sam," started a pottery and brick works at New Hamburg, Ontario. His two sons who were to follow the potting craft, William and Cyrus, were

born in 1831 and 1844 respectively, and Samuel died at New Hamburg in 1847.[3]

In January, 1855, William Eby bought half an acre in lot 16, Concession 7E, Township of Markham, from Daniel Strickler,[4] and established his first pottery as an individual proprietor. There is little information available on Eby's first operation; the site is presently the front lawn of a private residence and was available only for very limited excavation. From even this, however, we were able to gain some knowledge of his wares, though not of his production methods.

Eby remained in Markham for only two years, and on May 5, 1857, sold his land and pottery to John H. Byer for £150.[5] He and his wife Susannah then moved to Conestogo in Waterloo County, then, as now, a core of Pennsylvania-German Mennonite settlement in Ontario. For £225 he acquired somewhat over ten acres from Burton H. Curtis on July 2, 1857, in lot 32, German Company Tract, Woolwich Township[6] (Fig. 1).

The land may have included a working pottery and kiln, or a defunct but still-equipped operation. Burton Curtis, who had acquired 37 acres in 1843,[7] was listed as a potter only in 1856 and 1857.[8] The excavations at the Eby site, however, offered no archaeological evidence of any potter having operated at that site prior to Eby. The waster dump, built up over a long period, produced examples of the same forms from the lowest level to the uppermost, with few intrusive types, and none which could be specifically ascribed to the two-year Curtis period.

If Curtis actually operated as a potter, he may have occupied another site on the 10 acres, as yet unlocated, or he may have used the same site, but removed kiln waste for dumping elsewhere. A directory of 1870 mentioned that "Wm. Eby's Pottery was established in 1855; is built of brick, 30 × 22, two stories high – he manufactures brown earthenware."[9] This would tend to support Curtis' two-year listing as a potter, despite the absence of attributable waster pottery. Curtis, holding Eby's mortgage for £100, soon became a Justice of the Peace for Conestogo, but by the time the mortgage was discharged in 1864, Curtis had moved to the United States and was living in Indiana.[10]

The Eby Pottery was evidently a stable if not particularly prosperous business, and was certainly carried on in conjunction with farming as the major family occupation. By 1867 the Ebys had produced six children, including one who had died, aged seven, in 1866. The family wealth in 1867 was enumerated as real estate valued (for tax assessment) at £270, and personal property at £100, including three cattle, one horse, six sheep, and four hogs.[11]

With farming taking up the spring through fall months, pottery making was probably largely a winter venture, though clay would be mined, and perhaps wood stockpiled, at other times. Although children probably worked in the pottery from time to time, there is no documentary evidence of their having done so. With no more than one or two people turning pottery, probably a week's production was required to fill the kiln for firing. Once biscuit fired, the pottery was then glazed and finally refired. Eby's kiln does not appear to have been prolific.

In 1857, when Eby departed Markham, the buyer of his land and pottery there rented the operation to Philip Ensminger, who operated the pottery until 1862, after which it evidently stood vacant for a year. In 1864, Cyrus Eby, William's brother, then aged 20, rented the pottery from John Byer, still the owner. Cyrus Eby had probably trained under his father in New Hamburg – certainly he would have been too young to have apprenticed to William – but he ran the Markham operation for only three years.[12] Then in 1866 Cyrus too departed for Conestogo, to go into partnership with his brother.

William and Cyrus Eby operated the pottery in partnership into the 1890s. Evidently over these years there was little increase in size of the physical plant or in business. In fact, business volume may well have dropped through the decades. In 1890 William Eby's net worth was listed as $2,000–5,000, and his credit as fair, or limited.[13] Cyrus Eby had dropped out of the pottery (or died, though date is unknown) by 1895, when the pottery was again listed to William alone.[14] William Eby's sons were also coming into the business. Cyrus, born October 31, 1866,[15] was first noted as managing the franchise for sales of pottery in 1889.[16] William D., born March 26, 1877, as the youngest and last of nine children,[17] went into partnership with his father in 1900,[18] certainly after some years of apprenticeship.

The pottery operation about 1900 was still physically very small, and had probably grown little if at all since its formation. The main building, presumably built by Eby during the late 1850s, was only 22 by 30 feet outside, with brick walls on a stone foundation, and a partial cellar. The main floor was the pottery turning room, probably used for drying greenware as well, and processed and refined clay was kept in a loft above.

Below the pottery, to the southwest, the ground sloped to a small stream. Outside, on a level below the main brick building stood the pug mill – a huge upright barrel with a toothed, central, vertical shaft. The pug mill, much like an oversized blender, was powered by a horse pulling a horizontal overhead beam slowly around, and was used to clean and refine raw clay. Finally, behind the pug mill and downhill from the storage shed, stood the kiln, a stone-floored, brick-domed beehive furnace, heated through two fireplaces and fuelled with cordwood.

Behind the kiln to the south, but on the same level, were two wooden storage sheds, one for cordwood and greenware awaiting firing. The other was the inventory and loading shed, where the finished pottery was kept, and loaded on wagons for shipment.

The finished wares were sold at the pottery to individuals who came by, but most of the production was sold through country general stores, and delivered from the pottery in a spring wagon. One of the best customers was Winger's Store in Acton, Ontario, about 28 miles from Conestogo over present-day roads, and probably about the furthest distribution of the pottery.[19]

William K. Eby seems to have been semi-retired about 1900, though the pottery was listed to him until 1905,[20] probably with son William as the actual potter. Eby's financial position in 1905 was hardly better than in 1890 – his net worth was listed as $3,000–$5,000, and his credit still fair.[21]

Eby died in 1905, at the age of 74. William, Jr. was not able to carry on alone, as his pottery and his skill at making the finer wares was evidently not up to his father's.[22] With demand for earthenwares (by now a completely obsolete ceramic type throughout 20th century North America) continually declining, William closed the pottery. Finally he and his mother, in April 1906, as executors, sold the pottery and the original ten acres to Menno R. Martin for $1400.[23]

The brick pottery building stood until 1912 or 1914, when it was demolished by pushing the walls into the cellar and foundation excavation and covering with fill.[24] The wooden buildings had probably been removed earlier. The site was planted as an orchard, probably not later than 1920, but many of the trees have since been cut. Except for only three trees, now stumps, in the pottery area, the site has not been utilized for any purpose since the pottery was closed and abandoned.

NOTES

1. Ezra E. Eby. *A Biographical History of the Eby Family* ... Berlin, Ont., 1889, 3–5.
2. Eby, 64, 65.
3. Eby, 73, 74.
4. York County Registry Office, Memorial 58181, 31 January 1855.
5. York Co., Memorial 67574, 5 May 1855.
6. Waterloo County Registry Office, Memorial 847, 2 July 1857 (Book F-2, Abstract 896).
7. Waterloo Co., Memorial 370B, 2 May 1843.
8. Assessment Roll, Woolwich Township, Waterloo County, 1856, 1857.
   Robert W. S. Mackay. *The Canada Directory* ... Supplement, 1853.
9. *Sutherland's Perth & Waterloo Gazetteer and Directory, 1870–71*, p. 210.
10. Waterloo Co., Memorial 848, 2 July 1857 (F-2, Abstract 897).
    Waterloo Co., Memorial 2181, 23 July 1864.
11. Assessment roll, Woolwich Twp., Waterloo Co., 1867.
12. Assessment roll, Markham Twp., York Co., 1857–65.
13. *The Mercantile Agency Reference Book (and key) for the Dominion of Canada* ... Montreal, Dun, Wiman & Co., 1890.
14. *Province of Ontario Gazetteer and Directory, including the City of Montreal, P.Q.* Toronto, Might Directory Co., 1895, 221.
15. Eby, 74.
16. Assessment roll, Woolwich Twp., Waterloo Co., 1889.
17. Eby, 74.
18. *Ontario Gazetteer and Directory*, 1900.
19. Personal conversations, D. B. Webster and Simeon Martin of St. Jacobs, Ontario. Simeon Martin has a phenomenal memory, and remembers the pottery well from his boyhood – the 1890s and early 1900s.
20. *Ontario Gazetteer and Directory*, 1904.
21. *Mercantile Agency Reference Book*, 1905.
22. Simeon Martin conversations.
23. Waterloo Co., Memorial 11170, 10 April 1906.
24. Simeon Martin conversations.

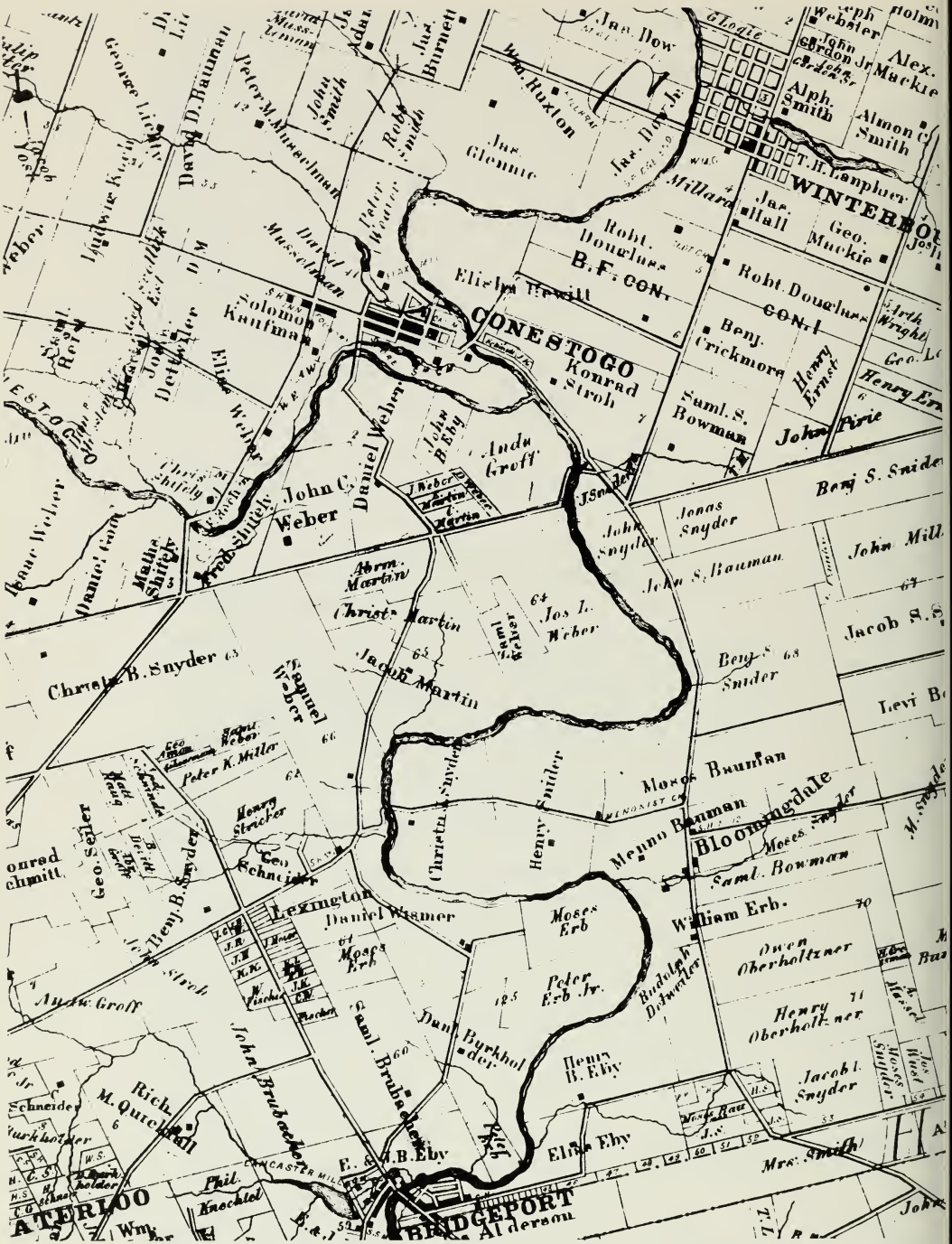

Fig. 1 Tremaine map of Waterloo County, Ontario, 1861, Courtesy Ontario Dept. of Public Records and Archives.

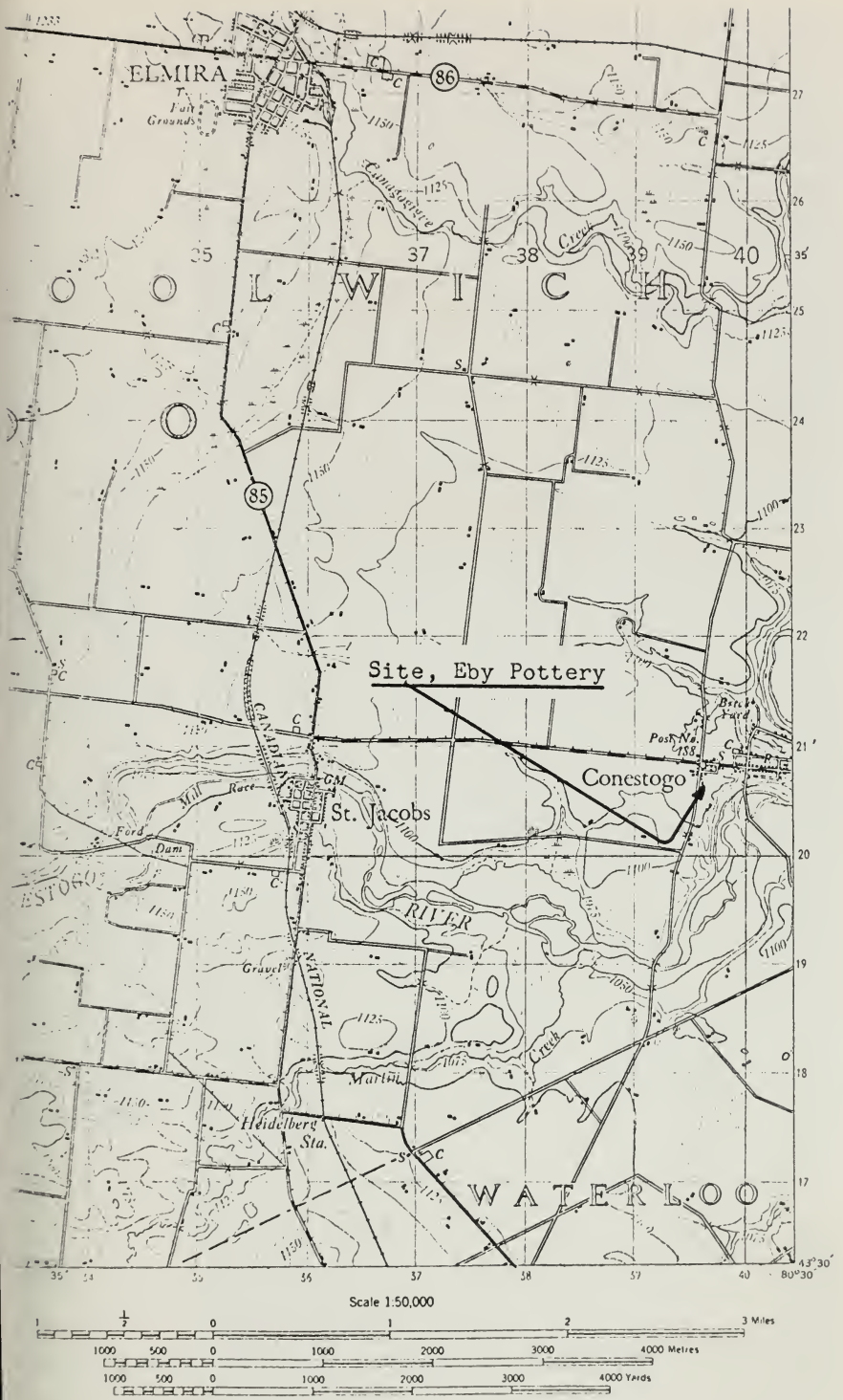

Fig. 2 Site of the Eby Pottery.

Fig. 3 The Pottery complex after 1890, as drawn from memory by Simeon Martin, who was familiar with the Pottery as a child. The brick pottery building is to the left, the kiln downhill in the centre, and two wooden sheds are to the right. Evidence from excavations reasonably supports this sketch.

The Pottery Site

The Eby Pottery was located one-quarter mile southwest of the village of Conestogo, on the Waterloo Road, with the pottery buildings 75 feet off the road on the east side. The complex was built on sloping ground which dropped gradually, from north to south, to a small stream 100 feet south of the pottery. The stream is fifteen feet in elevation below the top of the foundation walls of the main pottery building.

The road in the 19th century was a dirt-surfaced secondary route. An original downgrade to the stream has been eliminated by a filled embankment on which the road now runs, and the road is asphalted. Land-fill for the embankment did not cover, nor did grading disturb, any part of the pottery site.

Over the site the general soil type is a brown loam, extending in depth to as much as three or four feet in some areas. The sub-soil is a sandy clay.

Only two masonry structures existed in the pottery complex, the main pottery building and the kiln dome. The pottery stood on relatively flat ground, with a narrow wagon track between it and the boundary of the neighbouring property to the northeast. Prior to excavation, the northwest and southwest pottery foundation tops were barely exposed and visible through matted grass (Fig. 4). There was no apparent surface indication of any other structures.

The kiln had originally stood some twenty feet south and east of the pottery building, with its floor elevation six feet below the top of the pottery foundation walls. Behind the kiln, to the southeast, were originally located two frame sheds, as related by Mr. Simeon Martin. Simeon Martin, an elderly man with a precise memory, has always lived in the Mennonite community of the Conestogo area. He remembered the pottery operation well as it existed in the 1890s and early 1900s, and gave us the benefit both of his impressions and of a quite accurate sketch from memory of the Pottery complex (Fig. 3). He also located for us the kiln base and other features.

The site was open and clear, covered with heavy grass, burdock, and a few heavy bushes, all easily removed. Two exposed stumps of apple trees long since cut were on the site, and other apple trees, quite old, are still growing to the southeast.

The Excavations

The first period of excavation was carried out in mid-June 1967, in a total of ten working days. With Dr. Walter Kenyon as archaeologist and the writer as field director, the crew was composed of several ROM staff members and a varying eight to twelve volunteers from Brantford, Hamilton, and the immediate area.

Fig. 4 The site, prior to excavation, viewed southeast. The southwest foundation wall of the pottery building is visible at the left.

Fig. 5 The site, prior to excavation, viewed northeast. The southwest pottery building foundation is just visible in the centre of the photograph.

This stage of the excavations was devoted to exposing the building, locating and running a trench through the kiln area, and exploring the waster dump with a pattern of test pits.

In October 1968, additional excavation was carried out over five working days, with a small crew of ROM staff and volunteers under the writer's direction. Work at this time focused on excavating the kiln surface, and on extending a trench through the centre of the waster dump area.

The initial phase of excavation in 1967 consisted of exposing the northwest and southwest foundation walls of the pottery building, in a series of ultimately connecting five foot squares outside the walls. These squares were excavated to the base of the foundation walls, which were footed on an undisturbed brown loam. A small quantity of pottery sherds was mixed in a layer of surface humus and debris removed along the northwest wall and the north exterior corner. A somewhat greater quantity of sherds was excavated in the same layer between the west corner of the building and the cellar entry-way. Waster material here was also scattered and unstratified, and was limited to the surface layer.

Along the southwest wall and the area excavated around the south corner, closest to the kiln, pottery waster was much more concentrated. Here sherds and heat-distorted pottery, from all stages of manufacture, formed a layer 12 to 16 inches deep, and lay immediately below the surface layer of sod and building rubble (Fig. 20).

The second stage of the operation consisted of excavating squares in the north and east interior corners of the building, exposure of the east corner of the foundation walls, and clearing of the exterior cellar entry-way. Except for the cellar entry, only occasional and isolated sherds were found in these areas, mixed with or just underlying present sod. Since the building had been demolished and filled, this was anticipated.

The cellar entry-way (Fig. 10) was completely filled with pottery waster, from the sod level to ground water level, at a depth of five feet. This waster material was mixed with black organic earth, probably from leaves which collected in the entry-way. Though the entry-way proved to be the deepest of the waster dump areas we encountered, pottery waster even here was unstratified, with no layering either visually apparent or indicated by differences in pottery types.

Coinciding with work on the pottery building, a five foot square was excavated east of the building. A five foot wide trench was then extended southwest, through the area of the kiln. The square and northeast end of the trench were dug in the area of a shed described by Simeon Martin, but showed no evidence of any building. Below sod level in these squares was a layer of waster 6 to 10 inches thick. All of this material was biscuit-fired but unglazed sherds, from utility crocks and jars. The kiln trench contained only scattered and isolated sherds, again just below sod level.

The kiln floor, of field-stone bedded in natural sandy loam, was circular and 14 feet in diameter. No pottery waster was directly associated with the floor, nor were any sherds found in the overlying sod. A quantity of curved ring-tiles, of a dense gray fire-clay and glazed brown, were found along the northeast side, and on the same level as the kiln floor surface. Because of

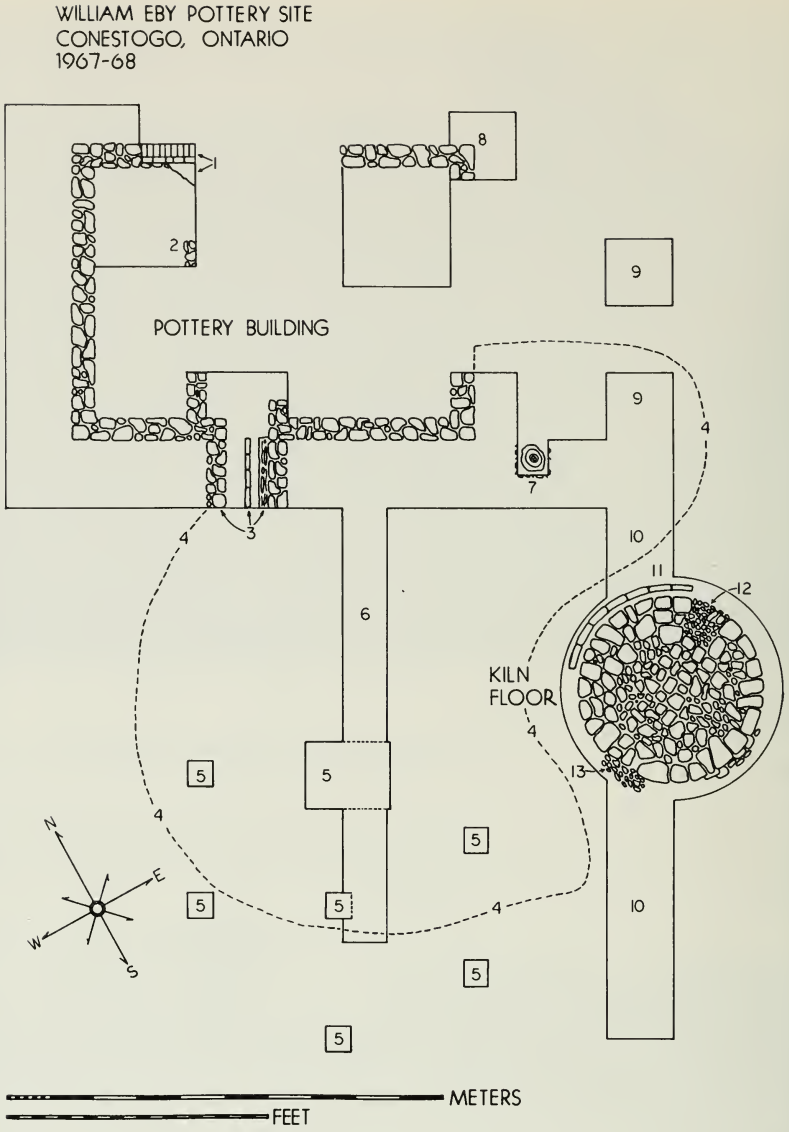

Fig. 6 Ground plan:

1. Segment of brick wall and of poured concrete floor
2. Interior cellar room, exterior corner
3. Cellar exterior entry-way, drain, and wooden ramp
4. Approximate limits of waster dump area
5. Waster dump test pits, 1967
6. Waster dump trench, 1968
7. Apple tree stump and roots
8. Northeast building corner (see also Fig. 11)
9. East square, 1967
10. Kiln trench, 1967
11. Kiln drain
12. East-north-east fireplace
13. West-south-west fireplace

their clay and density, these tiles were obviously not of Eby's own manufacture (Fig. 14).

The fourth stage of the 1967 operation consisted of excavating a pattern of seven two-by-two foot test-pits throughout the suspected waster dump area. These pits were ten feet apart, and at distances of 20 to 40 feet from the southwest wall of the masonry building. Those pits up to 30 feet from the building proved to contain waster, beginning below sod and rubble levels, to depths of up to three feet. As in other areas, the waster layer was apparently not stratified. All sherds recovered from each pit were retained, and one pit was enlarged to a five foot square.

Since other museum commitments were pressing, and diggers had to leave, at the end of the 1967 phase of the project the site was closed and the excavations filled.

We returned to Conestogo in mid-October, 1968, for further necessary work. One group uncovered the previously trenched kiln floor. The second group excavated a one-metre-wide trench, beginning two metres west from the south corner of the pottery building, and extending 12 metres to the southwest. (Between the 1967 and 1968 operations, we had switched from the English to metric systems for field work.)

This trench ran through what earlier test pits had indicated to be the approximate centre of the waster dump area, and it was excavated into underlying loam. The trench was intended both to expose a vertical cross-section of the entire waster area, as a check on the evident lack of stratigraphy, and also to explore pottery type distribution from one area to another.

No further work was done on the pottery building structure, nor was the area of excavation extended beyond the immediate pottery complex.

Discussion of Excavations

The main building around which the Eby Pottery was centred consisted of a brick-walled single storey structure, 22 by 32 feet exterior dimensions, with mortared rough field-stone foundations. The foundation walls, 0.55 metres thick, were footed in subsoil and proved to have been built in trenches. Average foundation depth was only 0.80 metres below surface, well above winter frost levels.

The walls of the building itself were 1½ bricks thick, and laid in English bond.

Excavations in the interior of the building showed that much of it had, at ground level, a poured concrete floor. Though the pouring of the floor, probably over an earlier packed earth floor, certainly post-dated the building itself, its exact period could not be determined (Fig. 7). Only in the centre southwest side of the building had there been a full cellar, a small room with interior stone walls extending to 5½ feet below surface.

Fig. 7 Foundation walls, north corner of the pottery building. In this area west of the cellar entry, no full cellar had originally been excavated; instead, stone walls had been built in a trench.
Double walls of locally produced brick were then laid up. This area of the building in later years had a concrete floor (extreme right) at the level of foundation wall tops.

The cellar exterior entry-way, original to the building, was flanked by stone walls to cellar-wall depth. The entry-way walls were sloped on top away from the main foundation walls, for rain run-off from covering double wooden doors. The entry-way contained not steps but a sloping wooden ramp to the outside. One plank of this ramp was found intact (Fig. 10). Beneath the ramp a drain of three inch earthenware tubing ran from the cellar out to the southwest slope. The cellar room had probably been continually wet, for flowing ground water lay at the level of the drain at the time of excavation. This may have been a cause for the abandonment of the cellar and entry-way, and subsequent filling with pottery waster, quite obviously some years prior to the closing of the pottery.

From Simeon Martin's drawing (Fig. 3), a horse-powered pug-mill for refining clay had been set just outside the cellar way in the 1890s. It is quite probable that the cellar room had originally been used for storage of processed clay, for supply to the pottery shop above.

The main building was probably not the original pottery. Sherds found mortared into the stone foundation wall, in the north corner and southwest side (Figs. 8, 9), indicate that waster existed on the site prior to construction of the foundations. All of these mortared-in sherds were from overlaid-rim crocks (Fig. 45), brown-slip covered and overglazed on the interior surface, and with unglazed exteriors. We can only conclude that the masonry building was most likely constructed early in Eby's tenure, and may have been preceded by an earlier wooden building.

When the pottery was demolished about 1912, the brick walls were pushed in, and in a few areas were found overlying the original surface (Fig. 11). Most of the brick was then probably salvaged, for the quantity

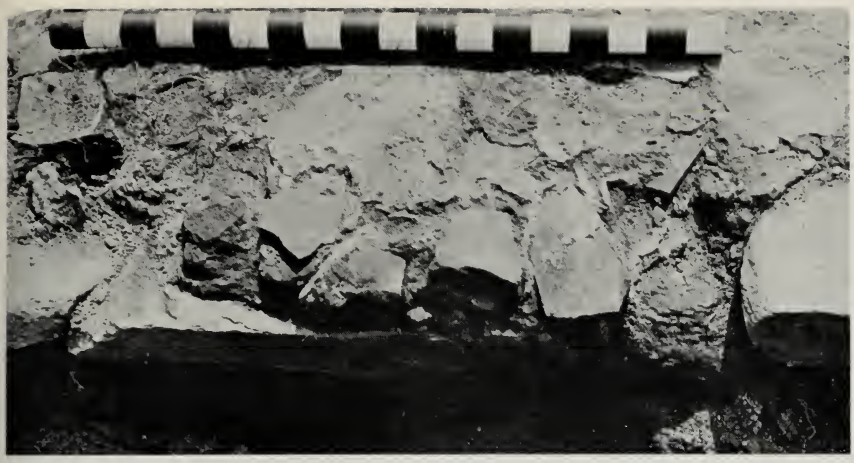

Fig. 8 The pottery operation apparently pre-dated the construction of Eby's main building, and Curtis/Eby may have used an earlier wooden structure. Several sherds, all unglazed, were mortared into the foundation top along the northwest wall of the building, as well as the interior face.

Fig. 9 Numerous unglazed sherds had also been mortared into gaps in the exterior face of the southwest wall.

Fig. 10 Cellar outside entry-way, pottery building. The cellar entry was flanked by stone walls, angled on top for hinged covering doors. It was originally provided with a wooden wheelbarrow ramp rather than steps, angled up to the outside surface. One plank remains, to the left of the range pole.
Beneath the ramp lay a tile drain, at the level of the cellar floor and present water level. In the Pottery's later years the cellar entry was abandoned, and allowed to fill with pottery waster, leaves, sod and other organic material.

excavated was not consistent with the remains of complete walls. Quantities of brick were also scattered over the southwest slope, overlying the pottery waster area.

The kiln (Figs. 12, 13) was centred seven metres south of the pottery building. It had been described to us by Simeon Martin as a brick dome over a stone floor, enclosed in a wooden shed, and fired with wood through two fireplaces. The 1967 excavations showed that only the round stone floor remained, with no trace of brickwork. However, waster material also established that the brick kiln dome had been renewed or rebuilt, probably several times over the years. The final dome was likely demolished and the bricks salvaged, as in the case of the building.

Fig. 11 About 1912 or 1914 the brick building was demolished. The roof and floors were evidently removed, and the brick walls pushed over into the building. Much of the brick was then probably salvaged for re-use.

The kiln floor consisted of a double layer of field stone, the lower layer bedded in subsoil, and extending some eight inches in diameter beyond the upper surface layer. This stepping provided a foundation base for the dome walls. The stone itself was carefully and tightly placed, though not cut, so that the floor was originally level and quite smooth. In recent years it has been badly distorted by frost heaving and the growth of heavy roots of dense bushes, which had grown up directly above the floor.

The kiln had been fired through two fireplaces, the hearths composed of smaller stones than the kiln floor. These fireplaces were located on the east-north-east and west-south-west sides of the structure, and seem to have been open to the inside, without apparent interior muffling, or separation of firing from pottery chambers. It is possible that the Ebys used as an interior firewall

Fig. 12 Volunteer diggers cleaning the surface of the kiln floor.

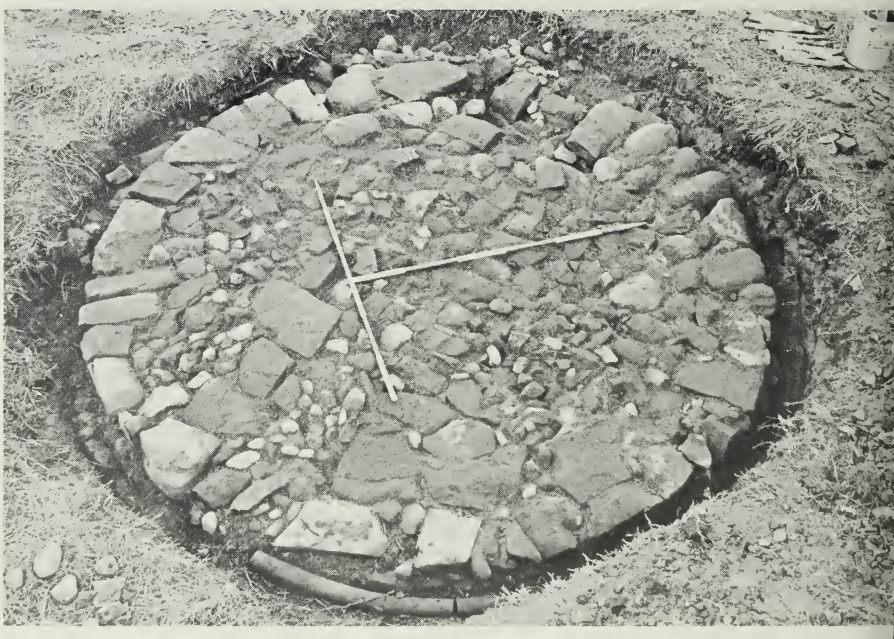

Fig. 13 The kiln floor was composed of a double layer of stone, the lower layer as a flanged dome foundation of slightly greater diameter than the upper layer. The floor was originally laid without mortar or any apparent clay packing or surfacing. Although originally very smooth, it has been badly disturbed by frost and heavy roots.
The kiln dome was of brick, with two fireplaces, but was probably demolished at the same period as was the building.

a partition of loose brick, erected and taken down for each loading and unloading of the kiln. No evidence, however, was found of this.

A kiln constructed in this manner was in any event woefully archaic, even for a rural family pottery. In the absence of a very strong draught the kiln would have filled with smoke during firing, and produced extremely reduced and dark pottery. Even in the best of circumstances, during firing there always must have been some amount of smoke in the pottery chamber. Additionally, such a physical arrangement certainly led to great variations in firing temperatures in different areas of the kiln, as well as great difficulty in either judging or controlling temperatures. These technical drawbacks were confirmed by later examination of large quantities of waster.

Only isolated sherds were found in the immediate kiln area, and no waster was associated with a final firing. Like the building, the kiln had certainly stood abandoned, or perhaps even collapsed, for some years prior to demolition and brick salvage.

Excavation exposed a rain run-off drain circling the uphill side of the kiln, on level with the base layer of floor stones, of three inch earthenware tubing identical to that of the cellar drain. This drain tubing had a single 1½ inch flat on the exterior, no mould seams, and appears to have been formed by pressure extrusion. It was definitely not of Eby manufacture, and was probably installed some years after building and kiln construction.

The fire-clay ring-tiles mentioned earlier were used as bases for the rims of heavy crocks during firing. Those recovered were concentrated over and around the east-north-east fireplace, perhaps discarded after the last firing.

Waster pottery – imperfect or broken pieces – seems throughout the Pottery's existence to have been discarded on the downhill slope forming a quadrant between the kiln and pottery building. On being removed from the kiln, unsalable material was simply cast or shovelled out to the west, eventually filling for a distance of 30 to 40 feet the area from the west entry-way wall (and the entry-way) to below the kiln. This waster dump area was established by the 1967 test pits, and confirmed by the 1968 trench.

Simeon Martin mentioned that waster was also removed by wagon-loads, and dumped along the banks of the Conestogo River, a few hundred yards to the southwest. How frequently this was done cannot be established.

The Pottery site dumping area appears to have been in continuous use. The lack of any stratification within the waster layer indicates that no fallow period occurred sufficient for vegetation or sod buildup.

Both the test pits and later trench were trowelled down very carefully, with close observation and heavy sample collection from all levels in all areas. Pottery waster dumps are dubious propositions in any circumstances, for aside from the fact that they contain some indeterminate samplings of production, they can rarely be placed in exact context with the pottery itself, and tend to lead to easy assumptions but a paucity of firm conclusions.

We must, for one thing, allow for haphazard discard, often under conditions of personal anger or extreme disappointment, for waster represented a great deal of lost time, effort and money.

If it can be generally concluded that the bottom of the waster layer represented the earlier waster deposited there, then Eby was producing

Fig. 14 Firing pans or saggers (see Figs. 18 and 48) and sectional ring tiles. Both are of dense fire-clay, obviously not of Eby's own production, and were found surrounding the kiln and throughout the waster area.

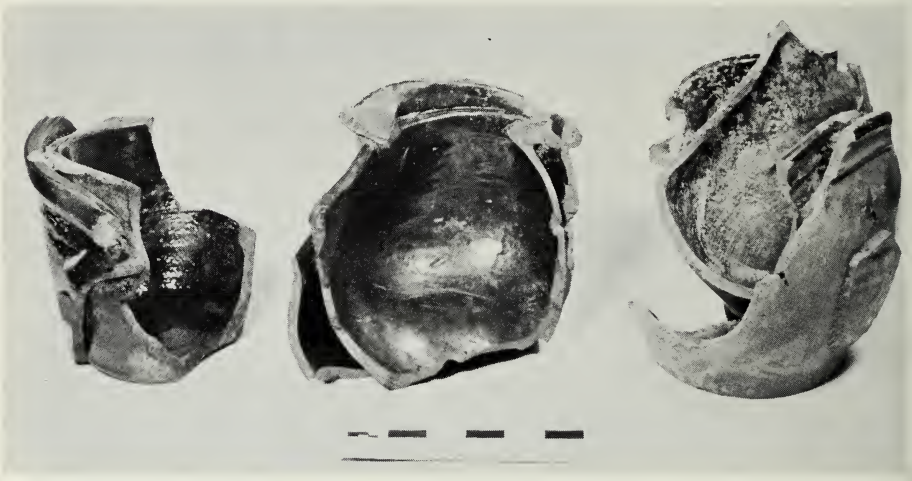

Fig. 15 Great overheating during firing caused the pottery to become plastic, and distorted by its own weight. These distortions of small crocks show the pot-within-a-pot system of stacking for firing.

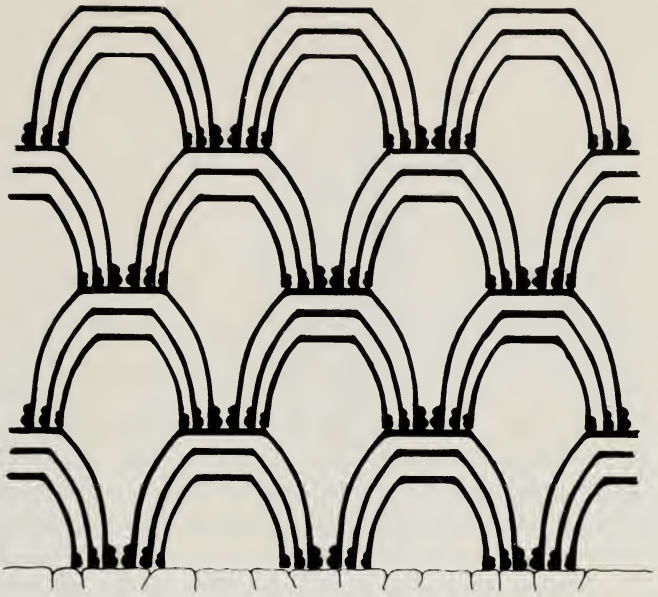

Fig. 17 Crocks and open vessels were stacked in the kiln rims down, rim to base, and arranged in nests of two or three. The drawing illustrates the arrangement, in two dimensions, as nearly as it can be established. Base ring tiles (Fig. 14) may have been used consistently, and were invariably used for the firing of larger pieces, but there was no apparent use of stilts or wedges.

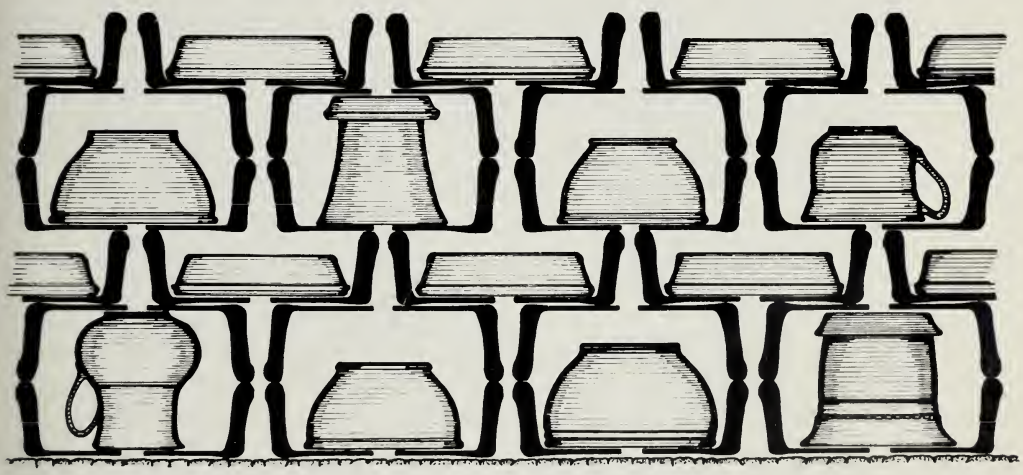

Fig. 18 Firing pans or saggers (Fig. 14) were used as firing containers only for small or fragile articles which could not be self-stacked. Of a dense yellow fire-clay, the saggers themselves were not produced at the pottery.

Fig. 16 (Opposite) On at least one occasion the kiln was so greatly overheated that the kiln dome itself collapsed. These distorted and flattened crocks are firmly fused to ring tiles, and to brick from the kiln structure.

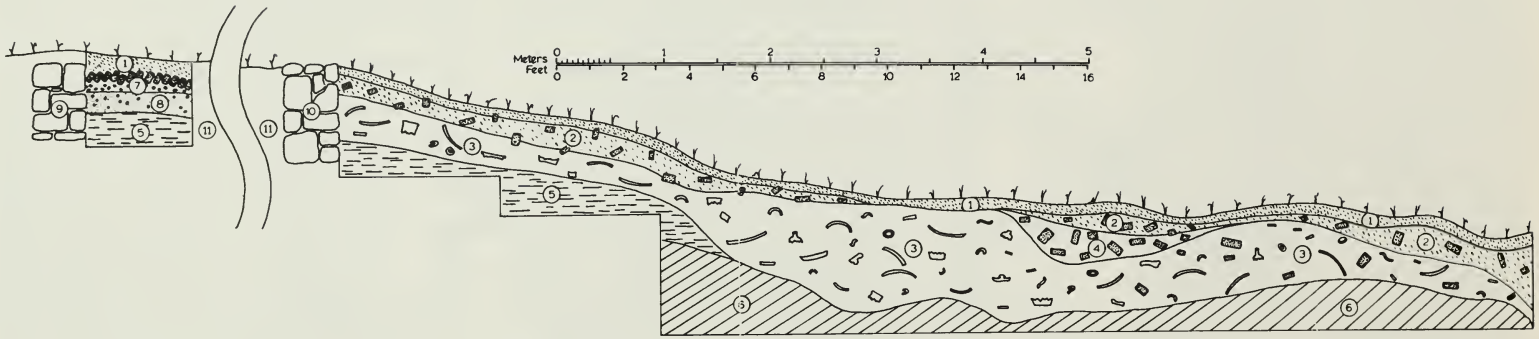

Fig. 19 Profile, waster dump trench:

1. Surface – sod
2. Mixed sod and brick rubble
3. Pottery waster
4. Brick rubble
5. Brown loam, probable removal from cellar excavations
6. Natural base, sand and loamy clay
7. Collapsed brick wall and rubble, Pottery building
8. Mixed earth and gravel fill
9. Northeast foundation wall, Pottery building
10. Southwest wall, Pottery building
11. Interior, Pottery building, not excavated

N.B. The absence of an early sod layer underlying pottery waster (3) indicates possible removal for mining of clay (6) prior to waster accumulation.

exactly the same forms of vessels in his earlier periods as in the 1890s. There was no substantive difference in the pottery forms recovered from lower and upper sections, nor was there any apparent meaningful distribution from one area of the dump to another.

The pottery waster layer ranged in depth from six inches down to three feet in original surface depressions (Fig. 20), and probably represents many years accumulation. Without knowing how often or how much waster was created through accidents, or how often it was removed to the river bank, however, we could not establish either the exact period or time span during which the dump was in use. Because of its location adjacent to the kiln, however, and because of the variety of the waster discarded, and the absence of any thin humus layers that might indicate periods of non-use, it is reasonably valid to conclude the Eby waster dump represents the full or nearly full period of the Pottery's operation, and of its range of products.

The pottery recovered and reconstructed from the waster dump is covered in the section on the pottery. It should be pointed out, however, that dumps such as this contain masses of very similar and alike material. The problems both of obtaining a true sampling, and of reconstruction of reasonably intact pieces, are thus much greater than on sites where each object is unique.

At Conestogo, during two sessions of exploration of the dump, we also tried two quite different systems of recovery, which depended on different factors, but which produced quite similar results. However, both methods are applicable to potteries as well as glass-works sites in many contexts, and are perhaps worth brief explanation here.

In 1967 the excavation of test-pits followed the generally accepted system of first choosing pits or squares for sampling, and then saving every sherd of waster from the chosen areas for later sorting and analysis. This resulted in massive rather than selective collection of material, and also required considerable space and a great many work-hours for sorting, both of which created difficulties. However, sorting and reconstruction had been completed before the second digging period. This manner of excavation is well suited to working with untrained diggers, and the sampling from selected areas is total. Given the vagaries of pottery waster dumps, however, the validity both of the choice of areas for excavation, and of conclusions from the total but narrow sampling recovered, is questionable.

In October 1968, in trenching through the waster dump, because of the greater area our system of recovery shifted to on-site selection and discard. We worked as carefully as possible, taking the fullest possible range of samples of forms, rims and glazes, including unavoidably much duplication, but discarding most material on the spot. In the process potentially reconstructable objects were virtually put together in the excavations – separately bagged and often partially fitted and taped. The surplus material necessarily collected was easily discarded later.

This system of selective collecting depends on a hard core of a few workers who know pottery and exactly what they are doing, and who can work very precisely. Such people are not always available. Under proper conditions, however, selective recovery seems to produce samples and reconstructions quite as completely as the mass sampling technique, and in far less time. At

Fig. 20 The waster dump area extended to the southwest wall of the pottery building. In this area the waster strata, shown here with overburden removed, ranged from 12 to 16 inches in thickness.

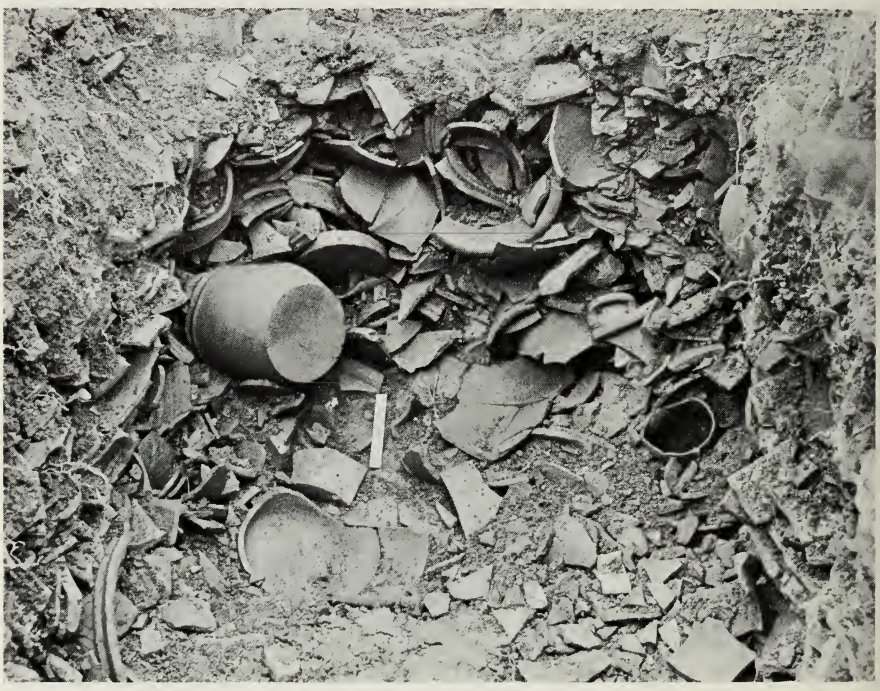

Fig. 21 Waster strata in the centre of the dump area were composed of solidly compacted pottery sherds, with occasional intact or partly intact vessels. The waster layer was sufficiently deep to have changed the configuration of the slope south of the pottery building.

the Eby waster dump, pottery types selected from the 1968 trench fully duplicated, without exception, all types from the earlier pits, and added many forms not previously encountered.

Excavations of the waster dump were not carried beyond the test-pits and trench, since these alone carried us to the point of evident redundancy, with almost wholly duplicate material emerging. Digging is expensive, and in waster dumps there is little point in continuing beyond the stage of apparent full recovery of material present.

Kiln Loading

The stacking of pottery in the kiln can be reasonably reconstructed from kiln-furniture recovered, and from waster pottery, particularly overfired masses.

Crocks, which seemed to be the primary product, were stacked rims down, smaller pieces inside larger, in groups of two or three (Figs. 15, 17). Probably open milk bowls were arranged in the same manner. Jugs (i.e., stoppered containers) were most likely stacked in tiers, bases down, so that the base of each jug in an upper tier rested on the necks of three jugs below. The lowest layer, against the kiln floor, was arranged with bases set into the flanges of fire-clay ring-tiles (Fig. 14) to separate the jugs from the stone floor itself. There were no finds of the kiln-furniture necessary for base-to-base, rim-to-rim stacking.

Pieces such as pitchers and flowerpots were probably fired in saggers – shallow firing pans – (Figs. 14, 48), or possibly stacked within open crocks. In either event, such pieces were more protected in firing than the heavier vessels, with no piece as stacked having to bear the weight of another. Plates were fired enclosed in saggers in the same manner (Fig. 18).

Pottery Analysis

Examination of waster pottery provided considerable technical information on the Eby's production techniques and processes.

The clay used for all vessels was mined locally, probably from the banks of the Conestogo River. In a natural state it is grey-blue in colour, with many intrusions. To be made usable, this clay was mixed with water, and broken up and smoothed out in the horse-powered pug-mill. Finally, the semi-liquid clay was screened to remove pebbles, grit and natural intrusions. It was then redried and stored to await use. Cleaning of clay usually seems to have been well done. Waster sherds were found to contain minute bits of grit or sand, and small air bubbles, but not of size or number to increase fragility of the pottery after firing. The clay after firing to maturity became a red-orange in colour (Munsell R-YR6/8). The fired pottery was light in weight, and

porous and unvitrified, so that all vessels intended for liquids required an interior covering glaze. The pottery was also quite fragile, and under conditions of constant moisture, i.e. as buried waster, tended to flake badly, both as body separation due to lack of vitrification, and less often, as glazes separating from pottery.

The waster dump indicated that a very high proportion of discarded material was reduction-fired to some degree, with resulting body colours ranging from dark red to grey-black. This occurred from filling of the kiln with smoke combined with a low draught, conditions which the Ebys at times had difficulty in controlling. Certainly, finished and salable pottery was that which was fired under oxidizing or minimal reduction conditions.

Quantities of twisted and folded remains of crocks, fired beyond maturing temperatures and to the point of plasticity of the clay, indicate that temperatures were difficult to judge or control. These distorted pieces were found in all sections of the dumping area, were invariably reduction fired to nearly a black body, and often occurred as large masses of numbers of pots melted and folded together (Fig. 15).

On at least one occasion firing temperatures reached the point of distorting fire-brick, and bringing down the kiln dome structure. Several masses of distorted pottery included kiln brick of much denser clay (Fig. 16).

GLAZES

The basic glaze on all Eby pottery was a combination of lead oxide, with silica from sand or ground flint, and a binder, mixed in water and applied as a liquid. In a pure form, this glaze provided a hard, transparent, and nearly colourless coating after firing. If other metallic oxides were added, notably iron or copper, a range of reds, yellows and greens was produced. Most of the glazes were to some extent transparent, and showed the body colour of the clay. Tin oxide, which used alone produces a white glaze, was occasionally added to other colours to make the resulting glaze opaque, and with the effect of muting the other metallic colours as well.

Simeon Martin remembered that Eby obtained his lead, the essential component, from the foil lining of tea cases. His copper could also have been obtained from scrap, and the iron oxide was nothing more than powdered rust. Of the metallic glaze colourants, probably only tin was a purchased component.

A transparent lead glaze over red-orange pottery resulted in a red-brown colour (Munsell R-1R 3/10). This could be given a speckled appearance by sprinkling powdered iron rust onto a pot still wet with liquid glaze. Another method was to dip a pot into a lead-copper based glaze, and then sprinkle with powdered rust, to obtain after firing an olive-green with orange-brown mottling. This technique and mottled glaze was common to many of the western Ontario Germanic potters.

Albany slip, a refined dark brown clay mixed with water and used as a liquid, was the most common coating for the lining of crocks and jugs. Though nearly always covered with an overglaze, brown slip provided a heavy sealing surface, and was in fact the standard material for lining pottery throughout North America.

Approximately 20 per cent of the samples recovered from the waster dump (the percentage does not necessarily reflect the total contents of the dump) were unglazed biscuit-fired wares, all of open crocks. It was evident that in some cases pottery was fired twice – first a biscuit-firing to finish the pottery, followed by glazing, and finally glost-firing to fuse the glaze. This was necessary in cases where glazes were known to mature at different temperatures than pottery. But double firing seems also to have been a traditional system, and was probably done even in cases when it was not absolutely required. Double firing also, in a kiln such as the Ebys', greatly increased the risk of breakage.

The following report of analyses carried out by the Royal Ontario Museum Conservation Department of glaze samples of different colours, shows that lead, iron, copper, and tin for opacity, seem to be the only components intentionally used by the Ebys. Other trace metals appear as impurities. The actual colouring of fired glazes on Eby pottery was extremely varied. It is unlikely that glazes were consistently mixed from batch to batch, and certainly impurities were present and had an effect on colours. Glaze colours were also affected by fluctuations in the temperature and duration of firing, and by the presence of reducing factors, i.e., smoke in the kiln.

CONSERVATION DEPARTMENT

EXAMINATION REPORT

OBJECT – Glazed potsherds numbered 1–7 *DATE* July 8th, 1968.
DEPARTMENT – CANADIANA.
REASON FOR EXAMINATION – Qualitative analysis of glaze components.
METHOD OF EXAMINATION – X-Ray fluorescent spectrometer.
RESULTS – In order to obtain basic data a complete scan of the glaze and underbody of sample 1 was taken. All samples of sherds with the exception of #6 were of glaze removed mechanically and powdered prior to analysis. Sample #6 was suitable for direct analysis.

The following elements were sought in each case: Barium (Ba), Antimony (Sb), Tin (Sn), Zirconium (Zr), Strontium (Sr), Arsenic (As), Lead (Pb), Zinc (Zn), Copper (Cu), Nickel (Ni), Cobalt (Co), Iron (Fe), Manganese (Mn), Chromium (Cr), Titanium (Ti) and Calcium (Ca).

Only those actually found will be reported.

Glaze and Sherd #1 – Light orange brown, transparent.
Lead: very strong.
Iron: strong.

Glaze and Sherd #2 – Green with beige spots, transparent.
Lead: very strong.
Iron: strong.
Tin, Zirconium, Zinc and Calcium: trace.

Glaze and Sherd #3 – Beige flecked with brown semi opaque.
Lead: very strong.
Tin: strong.
Iron: strong.
Zirconium, Strontium, Zinc and Calcium: trace.

Glaze and Sherd #4 – Light khaki, transparent.
Lead: very strong.
Iron: strong.
Tin: trace.
Glaze and Sherd #5 – Brown with dark brown flecks, transparent.
Lead: very strong.
Iron: strong.
Zinc: present.
Glaze and Sherd #6 – Dark green, transparent.
Lead: very strong.
Iron: strong.
Barium, Zirconium, Strontium, Calcium: trace.
Glaze and Sherd #7 – Green, flecked with green and brown, transparent.
Lead: very strong.
Iron: strong.
Copper: very strong.

COMMENT – The scan on the underbody from sherd #1 gave a positive trace for lead. Whether or not this is a deliberate addition would be subject to further analyses. Basically the glazes would appear to be lead coloured with iron. Glaze #7 has been coloured with a copper addition. Glaze #3 has probably been opacified by the addition of a tin oxide. All other elements are probably fortuitous.

(signed) B. LEECH

Conclusions

From both analysis of waster and examination of existing pottery attributable to the Ebys, one is left with several strong, albeit inconclusive, impressions. Much of the pottery actually marketed, usually that which had been fired to the desired red-orange colouring, was, in fact, slightly underfired, unvitrified, and fragile. The most stable and reasonably durable body was that which was slightly over-fired and somewhat reduced. This pottery was, however, subject to discolouration and occasional slight distortion, and hence was discarded.

From the waster it was apparent that the Pottery made only wheel-thrown containers and utility wares. There were no finds of moulded, pressed, or slip-cast pieces, i.e., mechanically-produced wares. So too, there were no finds of any pieces bearing decoration beyond rudimentary brushings or spongings of contrasting brown slip or copper green, or the occasional incised or coggled circumferal line. There were also no finds such as whimsys or toys, indicating special attention or reflecting artistic intent or merit. In total, one cannot avoid a conclusion that the Ebys were only passably competent potters, producing solely for the basic utilitarian needs of their marketing area, and perhaps not capable of finer work. Their technological knowledge seems to have been minimal, and the physical setup was sufficently crude that the firing of pottery was less than fully controllable, and very subject to destructive accidents.

The business was certainly often an exercise in frustration, for even in the absence of statistical information, technical factors indicate that pottery destroyed in manufacture and the waster dumped was probably a rather high proportion of total production.

That the pottery lasted for nearly half a century seems due not to any unusual excellence of its wares, but to a monopolistic position and market for its limited range of still very necessary products, in a small area. The pottery which was sold, like most coarse earthenware, was probably short-lived in actual use, and had a low survival rate. Thus repeat business alone was likely the strongest factor in the pottery's longevity.

Eby Pottery Types

EATING PLATES (Figs. 22, 23)

This term describes shallow dishes with sloping sides set at a 30 to 45 degree angle to the base. Only in one example is the rim demarcated with a thumb nail groove. Sizes varied little, with rim diameters from 8½ to 10 inches. Plates were commonly decorated with a "Z" motif, painted in brown slip, in the centre. Other plates were brushed with brown slip swags or spattering. All finished plates had a transparent lead glaze, though numerous biscuit-fired and unglazed pieces were found.

SMALL BOWLS (Figs. 24, 25)

Rounded bowls invariably had an overall glaze, generally copper green, and were probably used as general purpose eating vessels. They were decorated with simple thumb-nail circumferal moulding.

CHAMBER POTS (Fig. 25)

This term describes rounded pots 5 to 6 inches high with a handle and a wide, flaring rim. Only two examples were found of this type, both a soft white earthenware covered with an opaque off-white slip and overglaze.

MILK BOWLS (Figs. 26, 28)

These vessels are broad and shallow, with sides at an angle of about 60 degrees to the base, and flat-topped, somewhat flared rims. Only two examples reconstructable from rim to base were recovered, but a reasonable quantity of bases and rims found shows that the type was made by the Ebys. All bowls were large, with rim diameters ranging from 13 to 16 inches. One example is biscuit fired but unglazed, and the others are slip-coated and overglazed in shades of brown.

PITCHERS (Figs. 26, 27, 29, 30, 31)

Of some half dozen examples found, all had a somewhat bulbous body, a flattened oval handle, and a long neck with slightly flared spout. They were decorated on the exterior with yellow or green orange mottled glaze or brown slip spatter.

SAUCERS (Figs. 32, 33)

Saucers for flower pots measured only 6 to 7 inches in rim diameter. Most examples found were unglazed, but lime green, brown slip, and yellow glazes were also used. One was decorated with the "Z" motif more common on plates.

SMALL PANS OR BAKING DISHES (Figs. 28, 32, 33)

These were less commonly found, and usually had a brown-slip spattered Rockingham glaze. Most had base diameters varying around 6½ inches, with sides only slightly flared, and about 2½ inches high.

JUGS (Figs. 34–36)

Numerous examples were excavated of jugs for storage of liquids, all of the standard later 19th century cylindrical shape, with single loop handles. Capacities ranged from 25 ounces to 4 gallons. Finishes were invariably overall coatings of brown or white slip, with covering transparent glaze. Earlier forms, produced probably into the 1880s, had shoulders rounded into the neck. Later types had more sharply angled shoulders.

SMALL JARS AND LIDS (Figs. 37, 38)

Small utility jars of less than 2-quart capacity were excavated in quantity. These were divided into two types: jars with flanged necks to take plain disc lids, and jars with plain necks to take flanged lids. Both types appear to have been produced simultaneously. Most jars were finished with lead glaze but a few were glazed with a copper-tin-lead green glaze with iron-red mottling.

PRESERVE JARS (Figs. 37, 38)

These vessels preceded and later competed with glass canning jars. All forms excavated had flanged rims and lids, intended to be sealed with wax. Three rim examples reconstructed measured 3½ inches to 5½ inches in diameter. Lids measured from 5 to 7 inches in diameter, indicating manufacture of larger jars than those recovered. Lids were made in one piece, with upturned sides to fit over the flanged rims of the jars. Jars were glazed in shades of brown, black and green.

FLOWER POTS (Figs. 39–41)

(1) Completely plain unglazed pots with straight flaring sides, a central drainage hole in the base and no defined rim. These vary in base diameter from 1½ inches to 7 inches.

(2) Integral flower pot and saucer. Bases of six examples were found. All were fairly small, 5 inches in diameter. The interior base and the exterior were glazed with a speckled green or brown spatter, under transparent overglaze. A hole in the side of the pot allowed water to penetrate from the shallow saucer.

A fragment of scalloped rim, with a plain lead glaze, may belong in this category. Other rim sherds, unglazed only on the exterior, have corded rims or circumferal bands.

LARGE CROCKS

Large crocks may be divided into two groups:

(A) with an overall glaze, plain everted rim (Fig. 42)

(B) interior glaze only, overlaid and concave rim (Fig. 45)

(A) The first and most common group invariably had a simple, flat topped, everted rim. In two quite unusual sherds the rim was decorated with ribbing. A circumferal groove was often incised at ¼ to 1 inch below the rim proper, but the vessels were invariably undecorated otherwise. In a few cases there were two grooves below the rim. The crocks varied from 6 to 7 inches in height and base diameter. Glaze colours ran from deep black-brown through all shades of brown, yellow and green.

Crocks of both types are distinctly fingermark-corrugated on the interior.

(B) In comparison with type (A), this group is usually larger and more thick walled. The overlaid concave rim has a sloping top and was formed by folding the clay back on itself; the joint is sometimes clearly visible on the exterior. On some vessels, however, a thinner rim of the same shape was integrally formed. Rims vary from 1 to 1½ inches deep; there is often a groove in their concave centre and two parallel grooves about ⅓ of the distance between rim and base. The variation in size is considerable, ranging from small pots 5½ inches high with 4½ inch bases, to 10 inches high with a 6½ inch base. Glaze is applied only on the interior and spilled over on the rim. A few thin walled and near black-glazed examples were found, and some speckled brown, but the most common glaze was a sage green speckled with dark brown, which was largely restricted to this group. Unglazed or biscuit-fired pieces occasionally occurred. Two incomplete vessels have an abnormal curve to the body which suggests a more shallow bowl.

There are exceptions to the correlation of interior glaze only with the overlaid rim, and a small number of bowls with simple rims and sage green interior glaze are speckled with underlying red.

VERTICAL SIDED CROCKS

This is a type which occurred only as three or four rim sherds from this site. The rims are simple, flat-topped and everted, much like those on drain pipes, and the sides are nearly vertical. These pieces were probably very similar to salt-glazed stoneware cylindrical crocks of the same period. The interior is glazed.

COVERED CROCKS (Fig. 46)

No examples could be fully reconstructed, but numbers of rim sherds and lid fragments were found. These vessels were straight sided with overlaid and everted rims, and two large, ribbed, lug handles. These crocks were glazed only on the interior, while the lids were fully glazed. The vessels were large, with an average rim diameter of 13 to 14 inches. The lids were flanged on the underside to keep them in place, and had large central knobs.

DRAIN TUBING (Fig. 47)

The tubing made at Conestogo was intended as field drain, with diameters of 9 to 10 inches. Tubing was wheel turned as other pottery, very thick walled, and varied considerably in length. The flat everted rim at one end was 1½ inches wide, and indicates that the pipes were laid end to end, but without the flanges of modern drain tubing.

MISCELLANEOUS SMALL PIECES (Fig. 24–27)

Occasional small objects, probably made as unique examples rather than production pieces, were excavated, and others are known in private collections. All were utilitarian pieces. A miniature crock, a coffee cup, and a soup mug were excavated; a miniature jug, a vase, a covered egg cup, and an open salt cellar, all with supportable attribution to Eby, are known in private collections.

DRAWINGS, EBY – CONESTOGO POTTERY

N.B. – The terms "mottled," "variegated," and "speckled" are used as specific visual descriptions. "Mottled" refers to spots or blotches, of varying intensity of the same colour, but clearly evident and defined. "Variegated" refers to differing intensities or differing colours indistinctly shaded from one to another. "Speckled" refers only to sharply defined specks of differing colour or material.

Descriptions of glazed area coverage, i.e., interiors and exteriors, are exclusive of vessel bases, which were invariably unglazed.

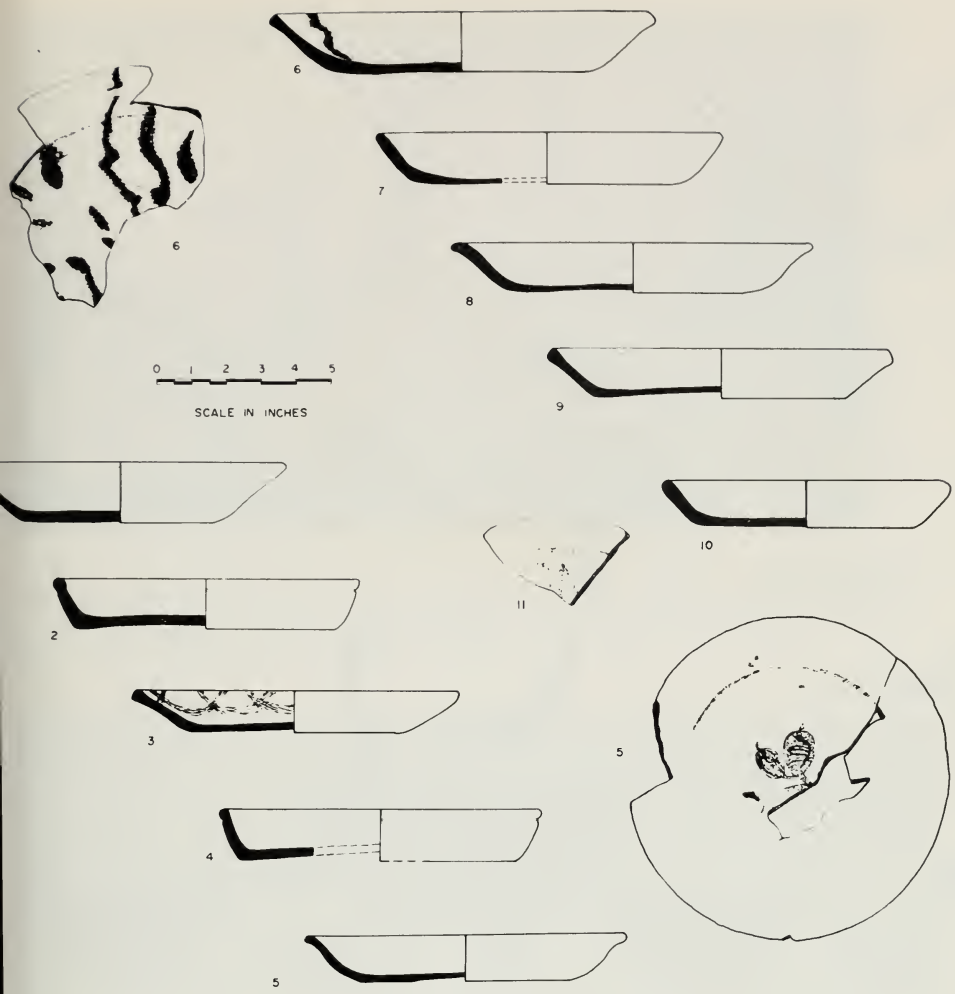

Fig. 22 Table and utility plates.

1. Transparent glaze, all surfaces; no decoration.
2. Transparent glazed interior; unglazed exterior.
3. Transparent glaze, all surfaces; over decorative brushed-on brown slip edging.
4. As No. 2.
5. Transparent glaze, all surfaces; over decorative motif in brushed-on brown slip, centre interior.
6. Transparent glaze, all surfaces; over decorative sponged-on brown slip, interior only.

Additional examples with mottled yellow-brown glazed interiors; unglazed exteriors.

Unique example with transparent glaze over circumferal green bands on rim, rim interior, and interior base/side angle.

7. As No. 5.
8. Transparent glaze, all surfaces; over spattered brown slip, interior only.
9. Transparent glaze over variegated dark green to dark brown slip, interior only; exterior unglazed.
10. Unglazed, biscuit fired.
11. Base sherd with decoration, apparently the tail of a fish, in brushed brown slip; transparent overglaze.

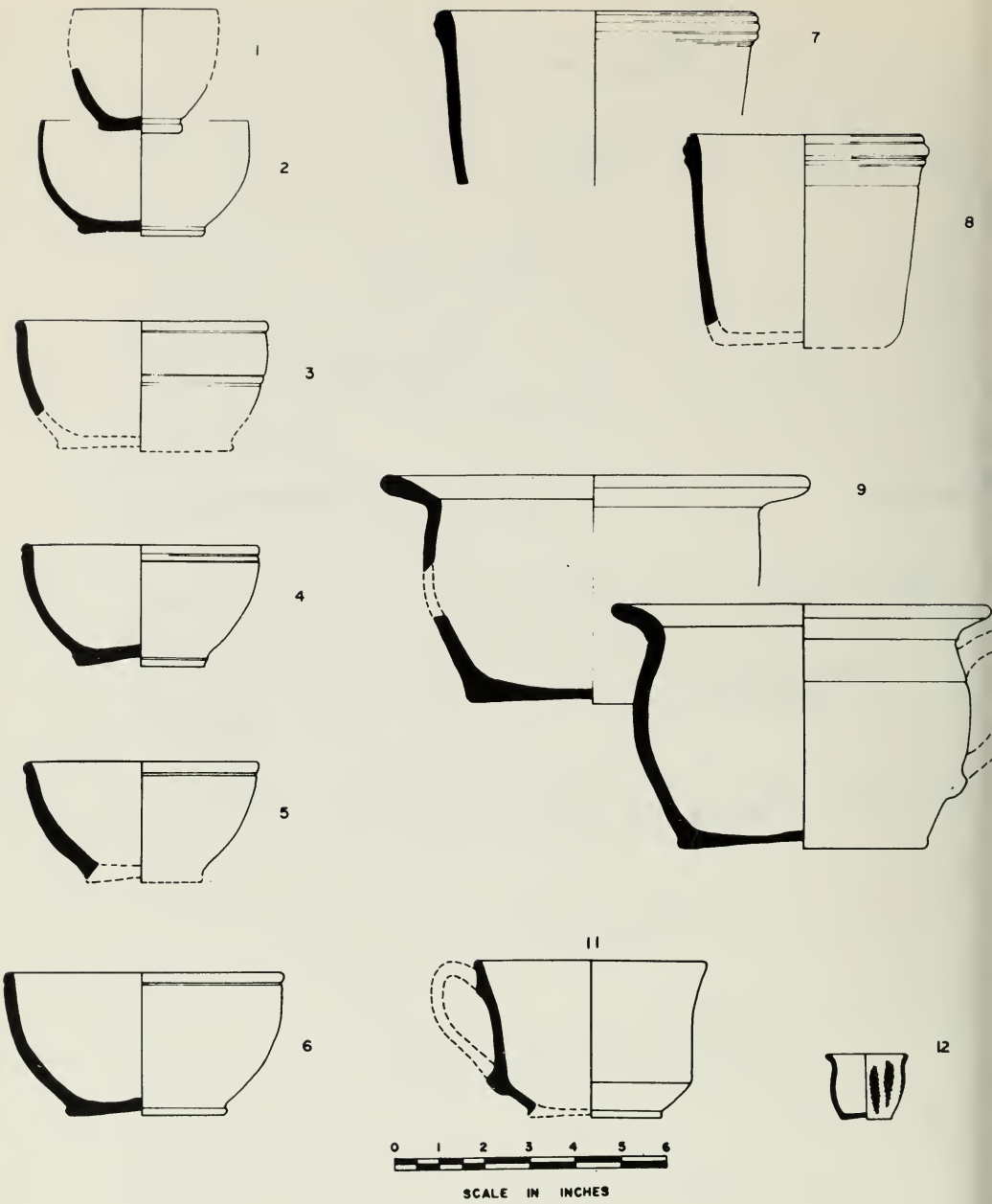

Fig. 25 Small utility pieces.

1. Egg cup (?), green glaze, all surfaces.
2. Bowl, green glaze, all surfaces.
3. Bowl, variegated green, yellow-green, and mottled rust-red glaze, all surfaces.
4. Bowl, dark olive-green glaze, all surfaces.
5. Bowl, mottled dark olive-green glaze, all surfaces.
6. Bowl, variegated yellow to dark yellow-brown glaze (apparent overfiring) all surfaces.

Additional examples with transparent glaze, all surfaces.

Fig. 23 Table plates and pie dishes were found in both biscuit-fired and finished form. There was considerable variation in glazing and decorating, but brown slip under a lead glaze was most typical.

Fig. 24 Eby soup and utility bowls were typically green glazed, as the four pieces in the foreground. The miniature crock, centre, is decorated with brown slip under a lead glaze; the intact bowl, rear, is undecorated and was acquired after the conclusion of excavations.

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7. Small crock, light apple-green glazed exterior; interior unglazed.
8. Small crock, mottled dark yellow and yellow-green glazed exterior; unglazed interior.
9. Child's chamber-pot, pale reddish-yellow glaze, all surfaces.
10. Child's chamber-pot, reddish-yellow glaze, all surfaces.
11. Coffee cup, mottled and flecked red-brown glaze, all surfaces.
12. Miniature crock, transparent glaze, all surfaces, over decorative sponged-on brown slip, exterior only.

N.B. The chamber-pots, Nos. 9 and 10, yellow glazed over a buff rather than red body, are the sole examples of this form, body, or glaze colour recovered from the Eby site, Conestogo. As such they are quite possibly intrusive.

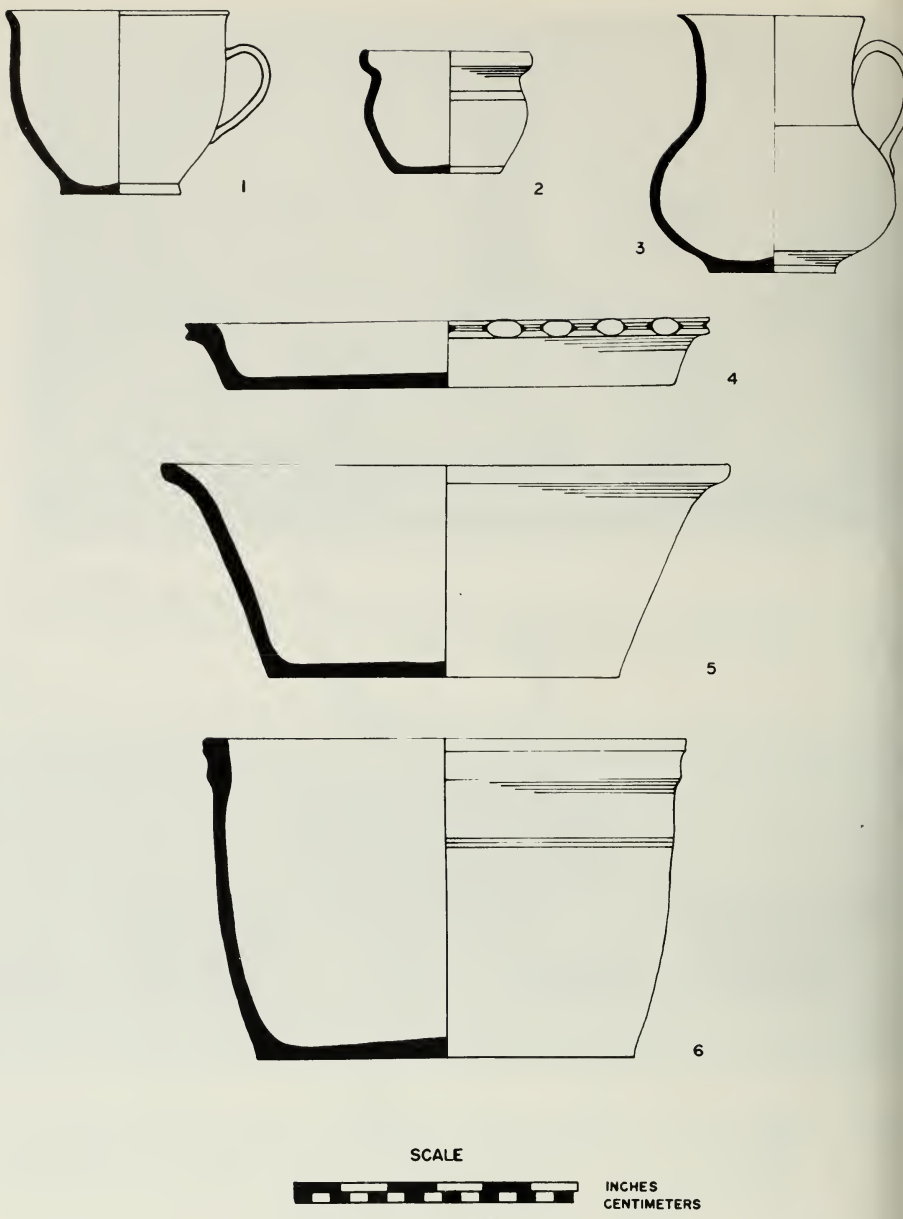

Fig. 26 Small utility pieces.

1. Large cup, very dark brown slip all surfaces, no overglaze.
2. Jar, originally covered, mottled light and dark brown slip spattered over yellow slip on exterior; transparent overglaze all surfaces.
3. Small pitcher, brown slip under transparent overglaze, all surfaces.
4. Saucer, spattered brown slip on exterior; transparent yellow-green glaze, all surfaces.
5. Milk-skimming bowl, transparent yellow-brown glaze, interior; exterior unglazed.
6. Small utility crock, brown slip, interior only; exterior unglazed.

Fig. 27 Miscellaneous utility pieces.
Left: large cup (handle missing), thin walled and well formed; brown slip washed, without overglaze
Centre: covered jar, decorated with spattered light brown, dark brown, and yellow slip
Right: small pitcher, brown slip washed with transparent overglaze.

Fig. 28 Left and centre: sections of milk skimming bowls, with light yellow-brown lead glaze inside; exterior unglazed
Right: saucer or baking dish with crimped rim. The exterior is decorated with spattered brown slip; the entire piece is overglazed a transparent yellow-green.

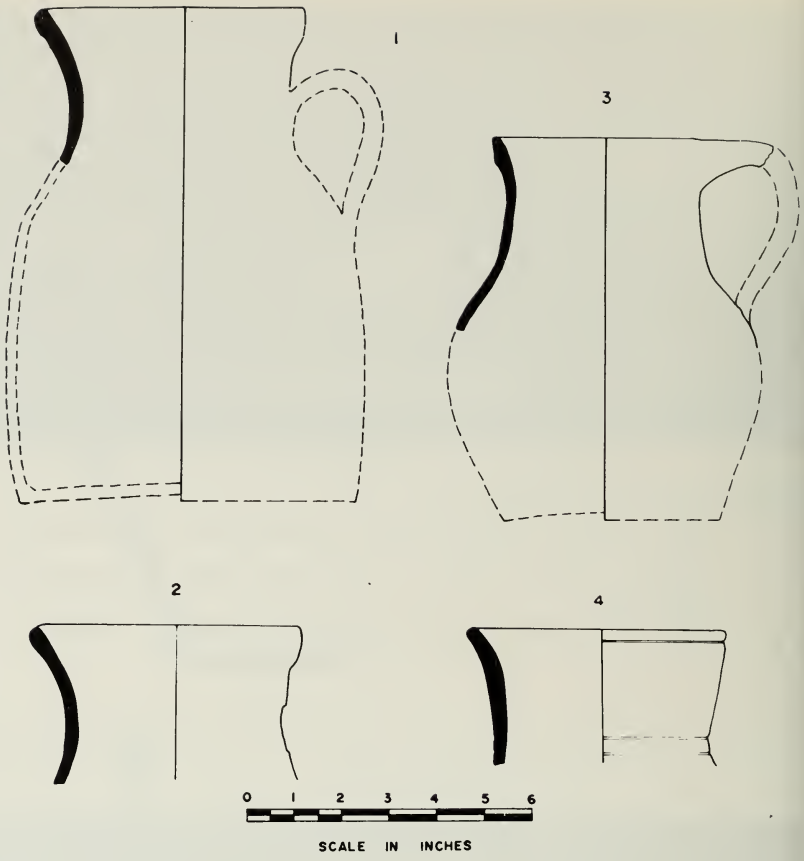

Fig. 29 Pitchers.
1. Mottled orange and green translucent glaze, over spattered brown slip.
2. As No. 1, variegated glaze.
3. As No. 1, variegated glaze.
4. Light yellow-green translucent glaze; over spattered brown slip.

Fig. 30 Two fragmentary large pitchers were glazed a mottled green and orange over brown slip spatter. Both are lead glazed.

Fig. 31 Intact Eby pitchers. The lefthand piece is glazed like the fragments (Fig. 30), but with green dominant. The other is brown slip spattered with lead overglaze. Private collections.

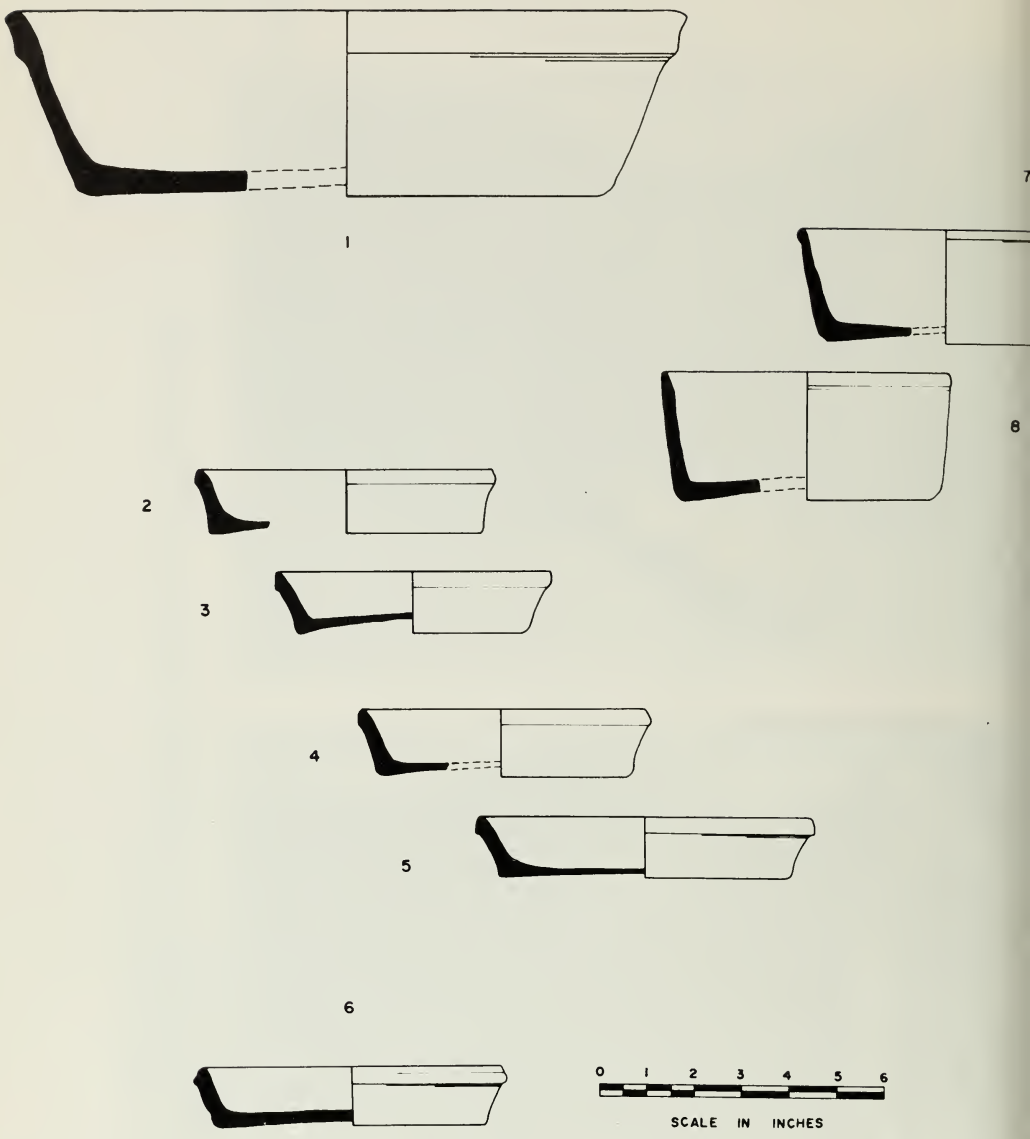

Fig. 32 Bowls and saucers.

1. Milk-skimming bowl, greenish-brown translucent glaze, full interior, heavy dripping exterior.
2. Saucer, probably flower-pot, unglazed.
3. Saucer, variegated yellow-green glaze, all surfaces.
4. As No. 2.
5. As No. 2.
6. Saucer, apple-green glazed, all surfaces, over scattered brown speckling, interior only.
7. Small bowl, transparent glaze over spattered brown slip, all surfaces.
8. Small bowl, transparent slightly greenish glaze over spattered brown slip, all surfaces.

Fig. 33 Left: Rockingham glazed round baking dish (type as Fig. 32, nos. 7 and 8)
Centre: top for a V-rimmed canning jar, glazed a speckled red-brown on green (type as Fig. 37, nos. 8–10)
Right: saucer or baking dish, light green glaze (type as Fig. 32, nos. 2–6).

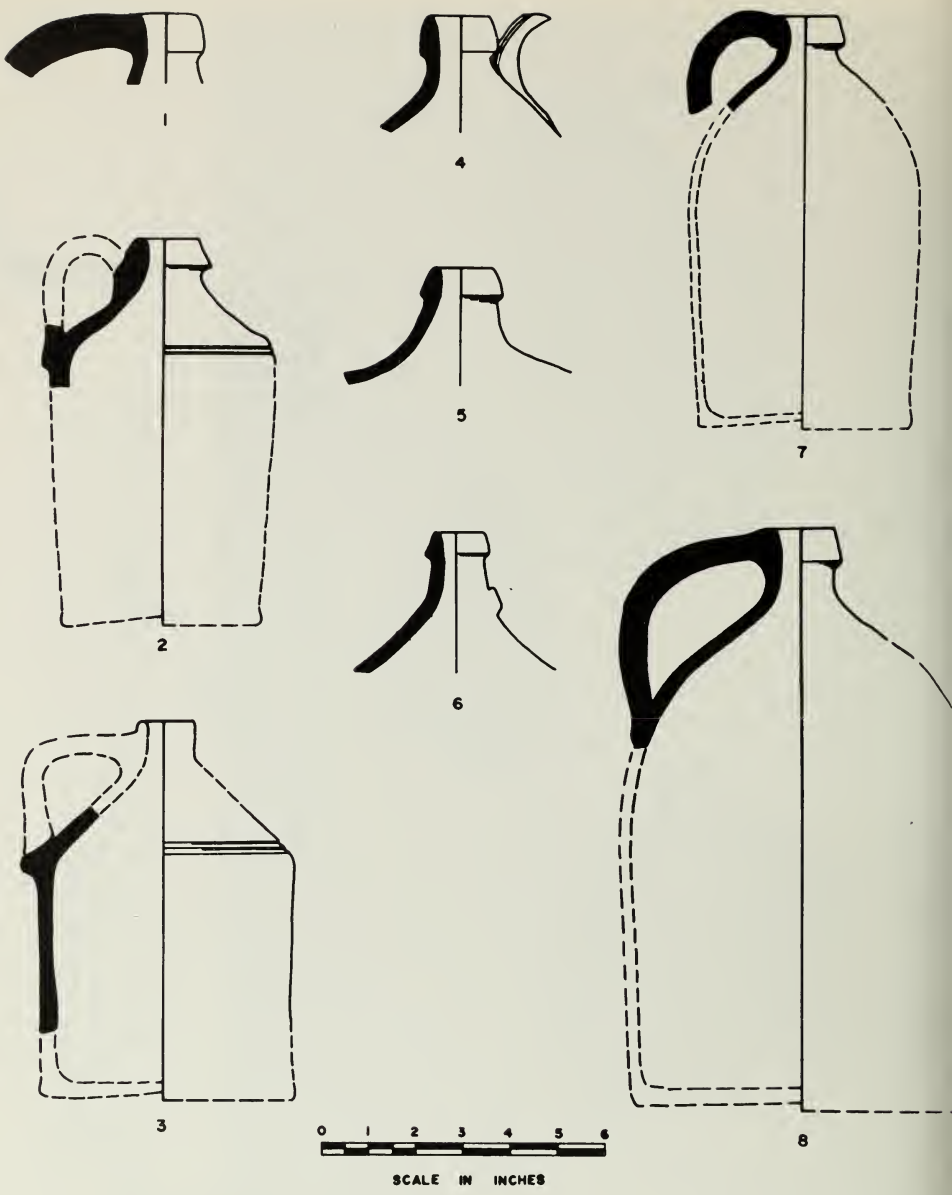

Fig. 34 Jugs and jug rims.

1. Dark brown slip under transparent overglaze.
2. As No. 1, exterior only; variegated yellow to red glaze with red specks, interior.
3. Light brown slip under transparent overglaze, all surfaces.
4. Heavily speckled brown on tan (probably slip), all surfaces; transparent overglaze.
5. As No. 3.
6. Pinkish translucent glazed exterior; dark rust-red-brown glazed interior.
7. Apple-green and red speckle glazed exterior; apple green and brown speckle glazed interior.
8. As No. 1.

Fig. 35 Jug tops, types as Fig. 34.

Fig. 36 Small jugs, approximately one-quart capacity.
Left: kiln distortion, indented and with a fragment of another piece adhering to the handle
Left centre and right: light green glazed, handles missing
Right centre: brown slip washed, all surfaces.

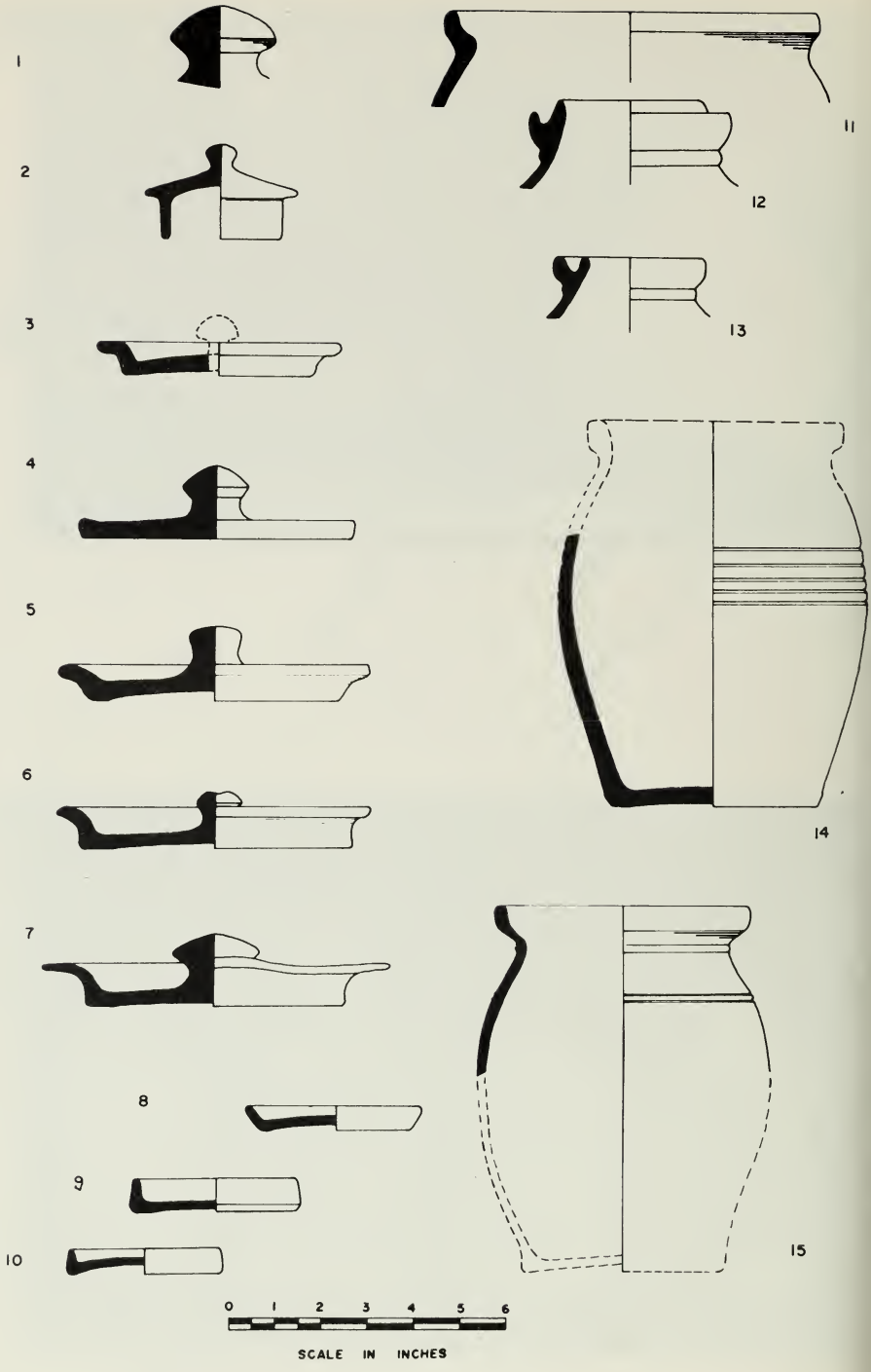
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Fig. 37 Jar lids and covered jars (opposite).

1. Knob only, for large lid, yellow-brown translucent glaze.
2. Moulded teapot lid, dark brown glaze, all surfaces; probably non-Eby intrusion.
3. Black specks in light olive-green glaze, top only; underside unglazed.
4. Dark brown slip coated top; underside unglazed.
5. Transparent glaze, all surfaces.
6. Dark mottled slip, all surfaces; unusually deep red body (possible intrusion).
7. Apple-green and mottled rust-red top; underside unglazed.
8. Sealing jar lid, unglazed, reduction fired, distorted.
9. Brown specks in transparent glaze, all surfaces.
10. Dark brown slip, all surfaces; body reduction fired.
11. Lidded jar, biscuit fired, unglazed.
12. Sealer jar, as No. 11.
13. Sealer jar, mottled brown slip in some areas, under transparent overglaze, all surfaces.
14. Lidded jar, mottled mustard-yellow to light olive-green glaze, all surfaces.
15. Lidded jar, light olive-green glaze, all surfaces.

Fig. 38 Jar lids and top.
Left: brown slip covered (type as Fig. 37, nos. 3, 5–7)
Left centre: jar top and rim, glazed light green (Fig. 37, no. 15)
Right centre: brown slip covered (Fig. 37, no. 4)
Right: red and light green glazed (Fig. 37, no. 7).

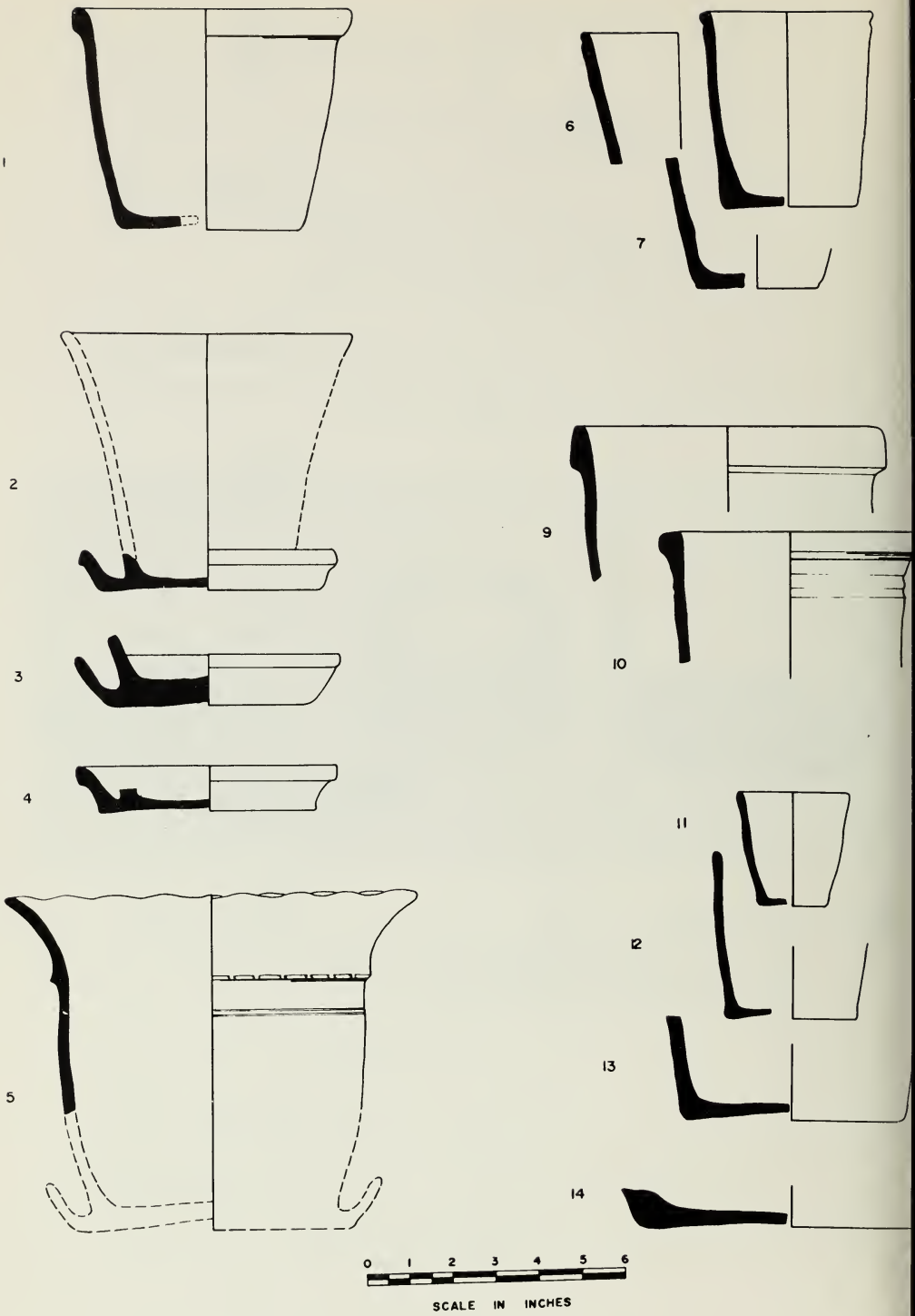
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Fig. 39 Flower pots and jardinières (opposite).
1. Unglazed.
2. Translucent yellow-green glaze over brown slip spattered exterior; interior unglazed.
3. Dark mottled and specked green glazed exterior; interior unglazed.
4. As No. 2.
5. Red-brown glazed exterior; interior unglazed.
6.–14. Unglazed; No. 11 reduction fired.

Fig. 40 Of the numerous flowerpot types Eby produced, those with integral saucers were the finest and most colourful. The excavated bases (Fig. 39, nos. 2–4) are identical to two known Eby flowerpots acquired in Conestogo. Both are spattered with brown slip under transparent overglaze, with interiors unglazed.

Fig. 41 Miscellaneous flowerpots.
Left: lead glazed exterior, collapsed from overfiring (Fig. 39, nos. 6–8, 11)
Left centre: jardinière section, unglazed (Fig. 39, no. 9 and 10)
Right centre: rolled-rim type, distorted in firing, unglazed
Right: section (Fig. 39, no. 5), fluted rim, red-brown glaze on exterior only.

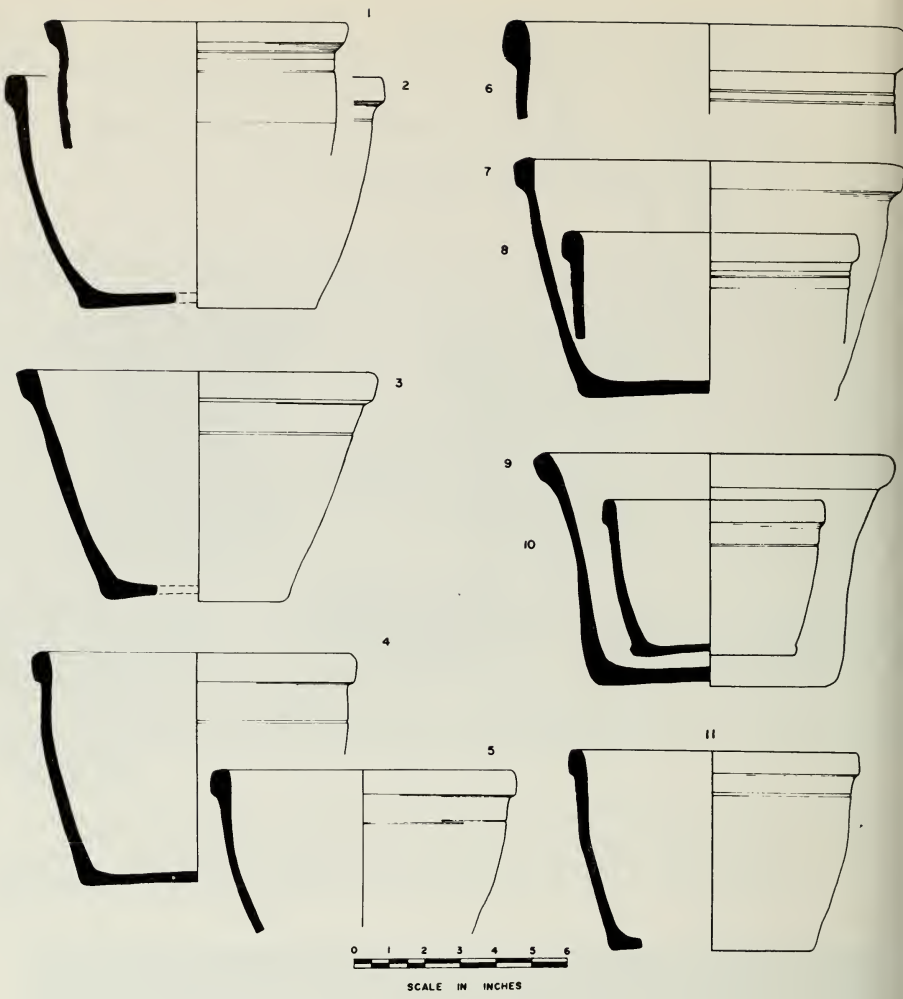

Fig. 42 General utility crocks, simple rims.

1. Dark brown slip coated, with red brown patches, transparent overglaze, all surfaces.
2. Brown slip under transparent overglaze, all surfaces.
3. Transparent glaze, all surfaces.
4. As No. 2.
5. Dark greenish brown slip, all surfaces; body reduction fired.
6. Transparent slightly pinkish glaze, all surfaces.
7. As No. 1, but no apparent overglaze.
8. As No. 7.
9. Translucent olive-green glaze, all surfaces, body reduction-fired.
10. As No. 4; body reduction-fired.
11. As No. 5, but body not reduction-fired.

Fig. 43 Intact cream crocks, acquired in the village of Conestogo and of known Eby manufacture, with sections of excavated straight-sided crocks. The cream crocks on the right and left are covered with brown slip, and the centre piece in white slip, all with transparent overglaze.

Fig. 44 Utility crocks, all from the Conestogo area, brought on request to the site by visitors. These vessels are identical in type to excavated recoveries (Fig. 42) and presumably of Eby fabrication.

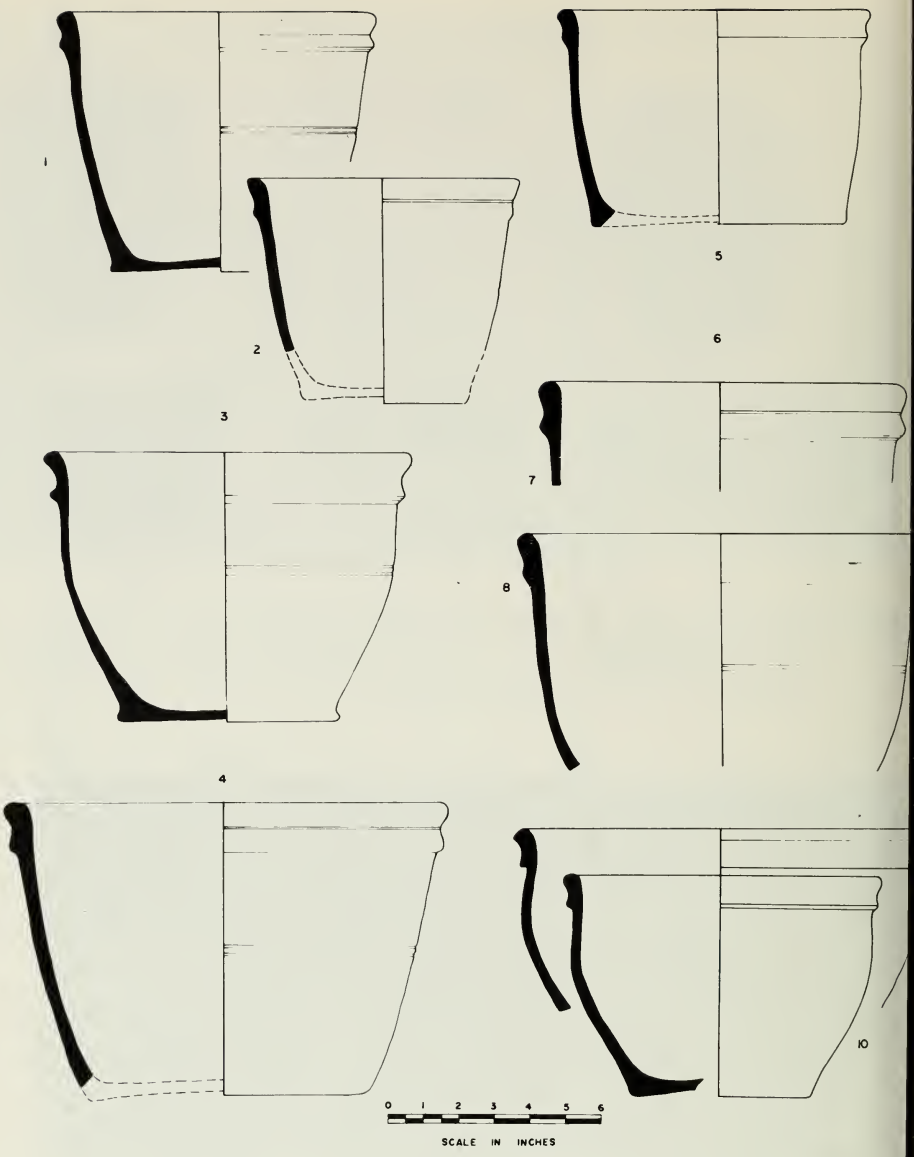

Fig. 45 General utility crocks, overlaid rims.
N.B. All vessels in this group have unglazed exteriors.

1. Apple-green and red speckle glazed interior.
2. Brown slip washed interior.
3. As No. 2; body reduction-fired.
4. Apple-green and heavily red speckle glazed interior.
5. As No. 2.
6. Apple-green, green-beige, and brown speckle glazed interior.
7. As No. 1.
8. As No. 2.
9. As No. 1.
10. As No. 2.

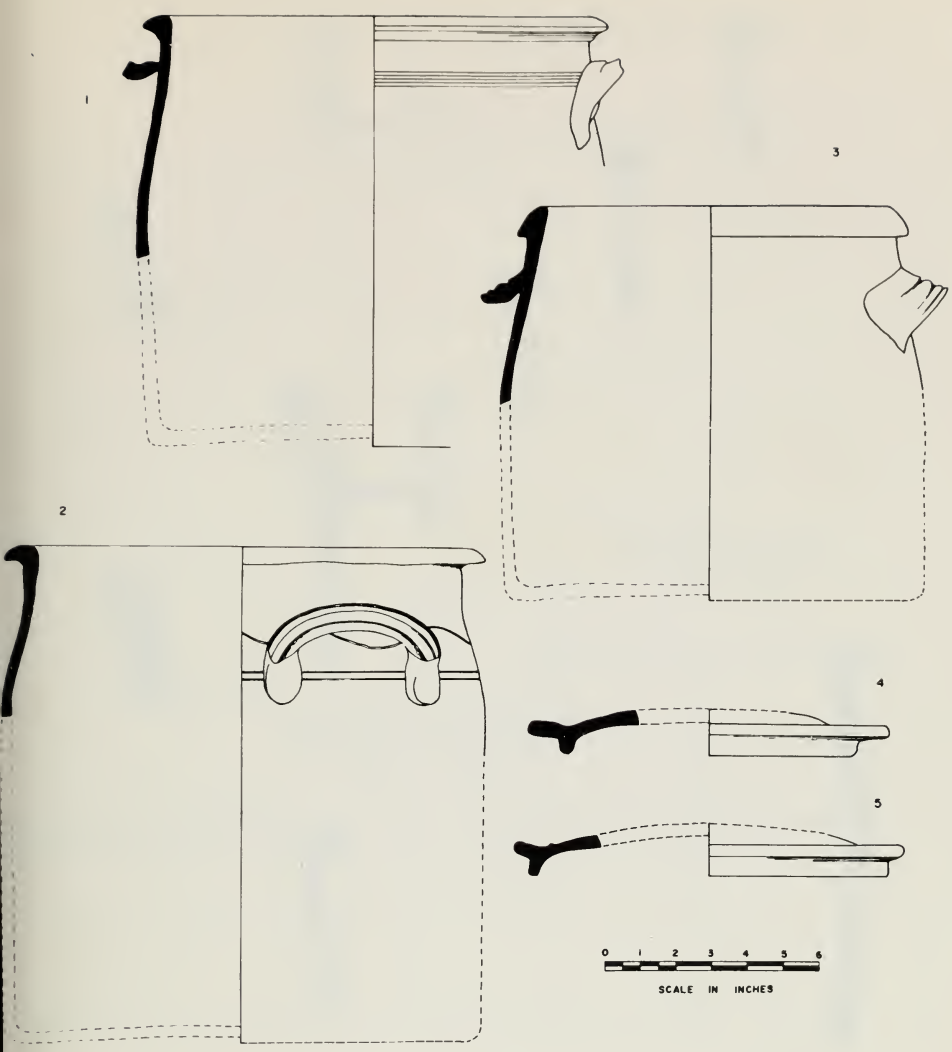

Fig. 46 Heavy crocks and covers.
1. Biscuit fired, unglazed.
2. Light brown slip washed interior; unglazed exterior.
3. Brown slip washed interior; unglazed exterior.
4. Brown slip coated top; unglazed underside.
5. Unglazed.

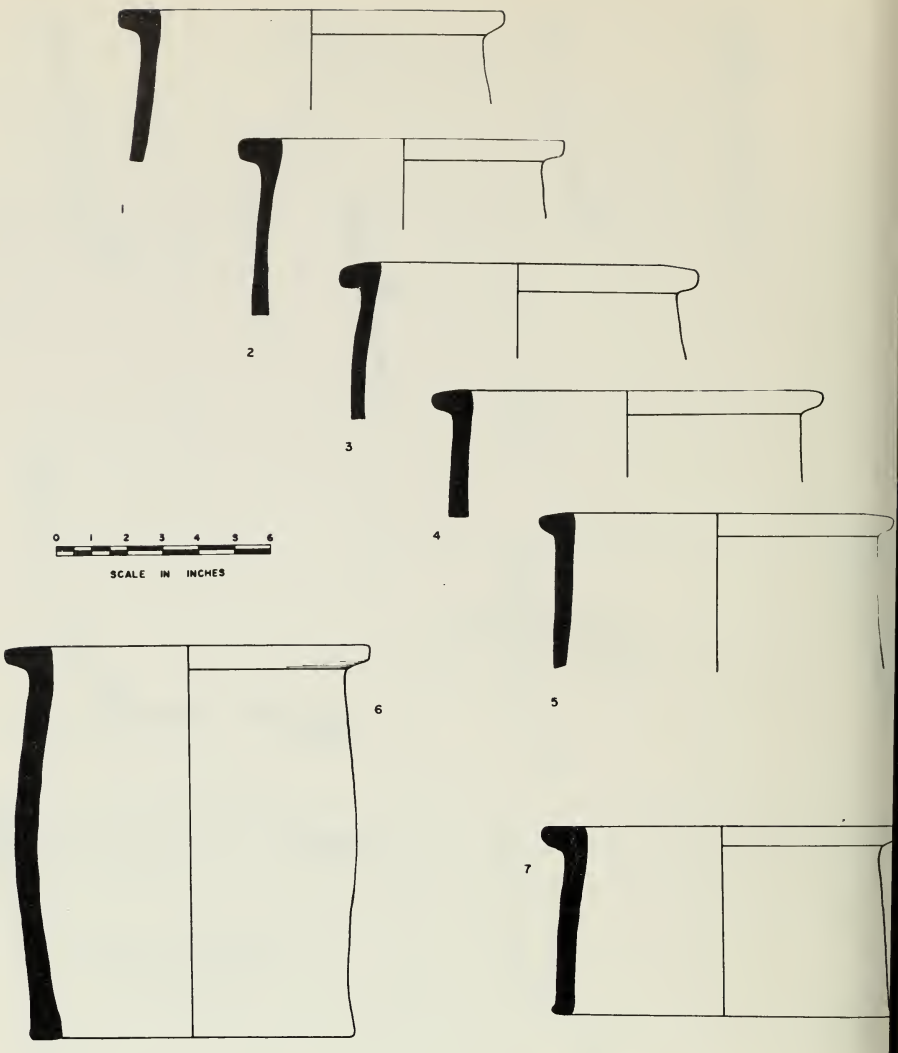

Fig. 47 Flanged field/drain tubing, all examples unglazed.

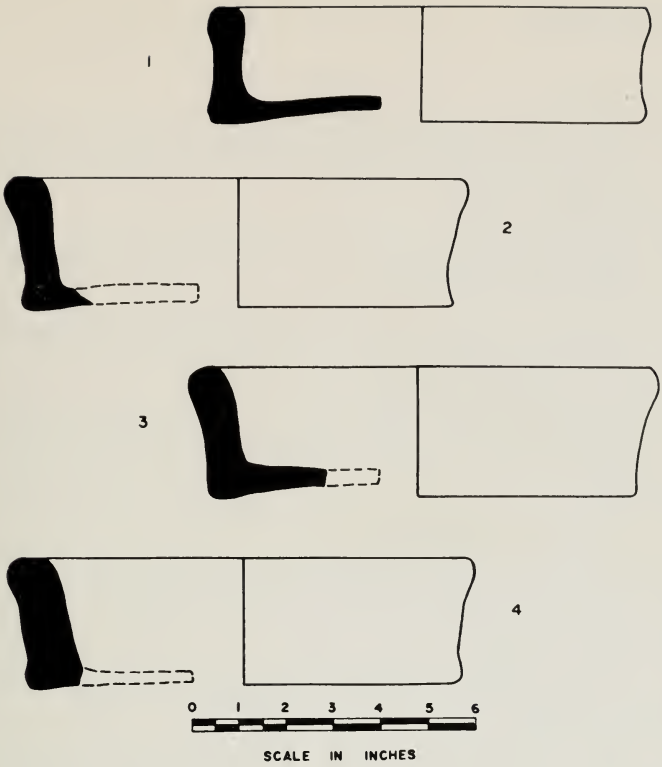

Fig. 48 Kiln firing pans (saggers), without covers, yellow fire-clay, not Eby production.

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